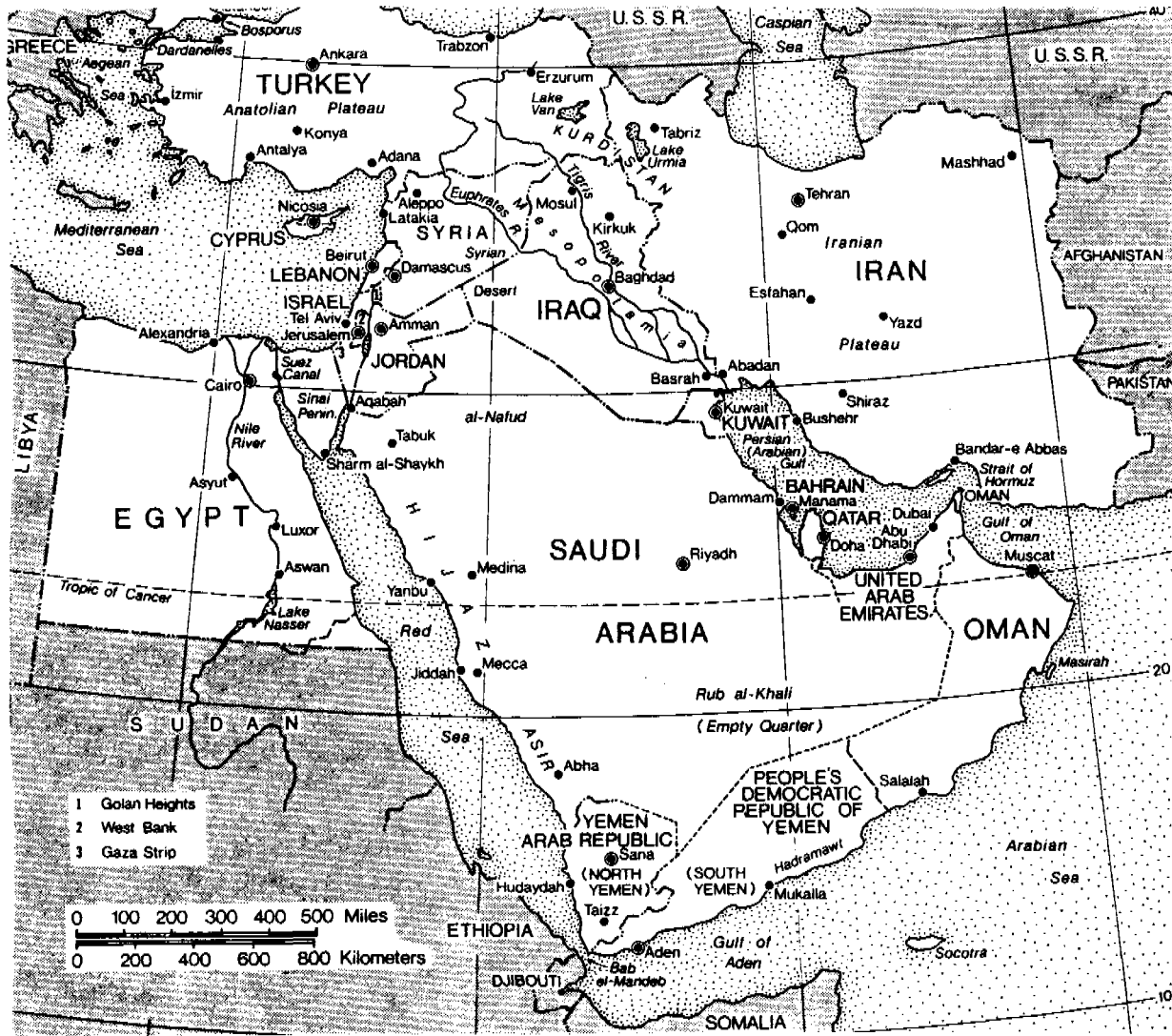


THE POLITICS OF DIVERSION

Bridging troubled waters in the Middle East



Thesis

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FOREWORD WITH ACKNOWLEDGMENTS

The history of this thesis may seem a trifle incongruous, but, to my great satisfaction, everything seems to have come full circle in hindsight. During my study of International Relations, I initially opted for the 'Middle East' research group, mainly since I was intrigued with 'Rentier State' theory. After finishing an interesting group research, I completed other classes, economics and public administration, prior to my employment at the Utrecht-based Centre for Agriculture and Environment. It seemed that the Middle East had been a one-off.

It was my present promotor, Mr Paul Aarts, who alerted me to the water problem in the Middle East last year. The problematic struck me as a new and exciting perspective on a familiar theme. Suddenly, everything started to come together: the Middle East, agriculture, environment, political economy, it was all in there. It soon dawned on me, though, that, a wider scope than usual was needed to get closer to what seemed to be the heart of the matter. To cover that vast area could not but outstretch the short time normally allotted to thesis writing. I therefore decided to delve into the theoretical side of things, allowing for practical elaboration by other researchers. The final building block was provided by Mr Henk Overbeek, who pointed out to me the relevance of defining the nature of the state, which has become central to the present thesis. The state would be the hyphen between different geographical and political levels, and so it is. The present thesis, then, is the result of a combination of literature from various fields, together with some 'free thinking'. I have made free use of concepts derived from Marxist, liberal and Weberian schools of thought, and offer some 'loose ends' to be elaborated at a later stage. There is an obvious downside of inconclusiveness, which may be resolved gradually as I develop my thinking, but on the whole, I found the experience most refreshing and sincerely hope the reader will feel alike.

I'd like to thank the people who took time to discuss the subject with me, notably Mr Albert Tuinhof of IWACO, who is not just an expert in the field, but who has a keen insight in the regional political situation; my teachers, Mr Paul Aarts and Mr Henk Overbeek, who read and discussed my drafts; and my wife Marijn, who supplied many inspiring ideas and comments - though as ever, any error of fact or judgment is my sole responsibility. I also wish to mention the people who have encouraged and supported my work: my family, Mr Henk Lof, friends and fellow students, and others. Finally, the reader is thanked for giving the thesis a try.

September 1992

Jeroen Warner

Introduction to the subject
matter

*...and if the river ran dry
they'd deny it happening*

David Sylvian, 'The Devil's Own'

With some frequency, warnings are aired saying that the next war will not be about oil or territorial claims, but about water resources. The faster these resources run out, the earlier they will be an occasion for a military showdown. In 1989, when UN's present Secretary-General Boutros Ghali was still a member of the Egyptian Cabinet, he was quoted as saying: 'The next war in our region will be over (...) water (...), not politics' (Vidal-Hall 1989).

In this thesis, I will endeavour to show that Boutros Ghali was not merely way off the mark on the first note - the Gulf war of course was mostly about oil, not water - but also on the second note, since water is, as will be demonstrated, indeed politics.

In this context, it would make much sense for states to exert themselves, with a view to managing their water consumption as efficiently as possible. Nevertheless, wastage is the norm. Twenty to twenty-five percent is wasted in the distribution process only, through leakages (Biswas 1991).

My main inquiry would read like this: **Why have the Mashreq states not been able to manage their water resources in an efficient way over the last decades ?**

It will be illuminating to be quite specific both on the nature of the problematic and on the concepts appearing in its phrasing.

To start with the latter: the **state** is generally used to denote two concepts: a country, that is, a territory and its inhabitants ('1st'), and the political authorities, government functionaries and institutions ('2nd'). The latter interpretation will be central to this thesis. The **Mashreq**, or Eastern part of the Middle East, is taken to be a 'region' in its own right, comprising Egypt, Israel, Lebanon, Syria, Iraq, Jordan, and the Arabian Peninsula.

In addition, though, Turkey, Sudan and Ethiopia will be included as supplementary regional actors in their capacity as upstream states to the Euphrates and Tigris (former), and the Nile (latter two). **Water resources** are those consumable fresh-water sources which either are, or can be, readily available to the state (1st) at surmountable cost. **Inefficiency** is synonymous to suboptimal utilization, wastage, non-sustainable use of **scarce** (finite; confining the scope for demand) resources. In defining efficiency, account must be taken of external social and ecological cost - though it has to be conceded that these are not easily quantified. These last few concepts will be elaborated in subsequent sections.

Next, the main themes will be elaborated in four sub-questions, each of which will be accorded a full Chapter.

#1 Is the nature of the state conducive to conservationist water policies? (Ch. 2)

#2 What role does water perform, for the state in its strategies to attain economic and political aims - and vice versa: do economic and political aims impinge on water policies? (Ch. 3 and 4)

#3 To what extent are water-related policies a drain on the state budget, and how does the state cope, i.e., which are its sources of capital? (Ch. 5)

#4 Which are the dimensions of change that would make for a more rational policy? (Ch. 6)

Aim and Design

For this thesis, I aim to develop a theoretical framework in which politics of scarcity with respect to water resources can be described for the Mashreq region. That is to say: if generalizations for global water politics around the globe may be inferred from the outcomes, that would be a happy, but unanticipated outcome.

This aspiration is the repercussion of a feeling of dissatisfaction with the literature which was available to me at the time of writing. Most of these books and articles, it seems to me, are too concerned with partial aspects. The very extensiveness of the problematic incites me to combine achievements of various disciplines (international relations, ecology, public management). To dam up an expected infinite series of interrelated aspects, I have consciously opted to consider a number of elements givens:

- *cultural factors*: Doubtless, there is a number of local differences of approach which impinge on use and allocation of water, while some decisions are attributable to cultural singularities. For this aspect to be addressed in a meaningful way would take an anthropological study which must remain outside the scope of this study.

- *institutional factors*: Traditions and configurations which have evolved over time may serve as an obstacle or an aid in choosing effective alternatives. The literature available to me is very inconclusive, which is why I have refrained from venturing a discussion of the nature of relations between various institutions which have or ought to have a say in allocation and use of water. However, this gap is to be filled by a forthcoming case study on this subject matter, as part of a more general theoretical book on conflict management in the field of public administration, edited by prof. P. Glasbergen.

- *historical factors*: I have decided to leave the discussion of political and tactical backgrounds to the drawing of boundaries by the colonial powers out of the account. I would be the first to acknowledge that these considerations have been instrumental in determining the present distribution of water resources within the region, but for reasons of brevity, I will only discuss recent state actions.

The time dimension I adhere to concerns an era spanning the last two decades - the era since the first 'oil shock'. A geographical trichotomy enables me to simplify and structure my analysis of the problem situation: the *global, regional, and state level*. At the state level, my analysis will highlight the *agricultural sector*, it being the largest water consumer by far.

There is an underlying assumption that water scarcity is not merely, or not only, a technical problem, but springs from structural characteristics of economy and policy-making. These structures in turn are cause and effect of *political strategies* and their repercussions. From this perspective, I develop a provisional *model*, a framework for further research and testing. The procedure, then, will be qualitative rather than quantitative in nature, but I will now and again take liberties to 'cross the ball', that is, to coin some suggestions as for angles from which operationalization of developed concepts may best be approached.

Chapter 1: *Framework*

- 1.1 Introduction
 - 1.1.1 Defining the problem
 - 1.1.2 Scarcity - a technical problem?
 - an economic problem?
 - a political problem?
 - 1.1.3 The Concepts of Development and Scarcity
 - Scarcity:
 - conceptions of scarcity
 - efficiency and loss
 - poverty and ecological degradation
 - Development:
 - development on the basis of rents
 - water as a precondition for development
- 1.2 Water politics
 - 1.2.2 Water and control
 - water: a centralizing factor
 - state aims
 - legitimacy
 - social configuration
 - water as a political asset
 - 1.2.3 States' power resources
 - I State
 - II Region
 - III World
 - Water strategy
 - 1.2.4 Brief outline of the following Chapters

1.1 Introduction

In this Framework, I develop the terminology which serves to describe the water problematic. Since I intend to analyze the problem in terms of 'scarcity', I will have to clarify what interpretation of that concept is implied. My conception of 'loss', another important theme, will turn out to be rather more extensive than is usual. I will not just depict the subject matter as a management problem, but place it in the context of economic development. in which the Middle East holds an idiosyncratic position. Notwithstanding idealist connotations, the line I take with a view to assessing water policies is essentially very 'rational' or 'materialist'; it is my contention that the creation of opportunities for economic growth are only favourable if social disparity and ecological degradation are limited to the minimum - since it is those externalities that are bound to hamper growth in the long run.

I will elaborate on this assumption in the course of this Framework. Moreover, I will indicate how and why water is, indeed, an object and an aim of politics at different levels: locally, regionally and globally. This line of reasoning has led me to use the three geographical dimensions just indicated, and three 'process dimensions', which will be clarified right away. The end of the Framework will briefly indicate how I will put these notions to use in subsequent Chapters.

1.1.1 Defining the problem

It will prove convenient to subdivide the water problem into different dimensions of analysis, which, though each has its own dynamics, are interrelated as well: a technical (1), an economic (2) and a political (3) level.

1. Scarcity - a technical problem?

In a technical sense, there is no water shortage in the Mashreq region. But a major share of the ground water stock are barely recoverable, since it is located several hundred feet underneath scarcely penetrable soils. Whenever exploitation of the resource is feasible at all, economic extraction, inadequate distribution and eventual (careless) consumption only contribute to the problem. The water problem's technical aspect, then, does not lie in a regional, absolute scarcity, but in local, relative scarcity of availability and use.

There is an additional reason why it is conceptually incorrect to speak of 'scarcity' or 'shortage'. Similar to water-rich regions such as Holland, storm floods are a familiar phenomenon in the Mashreq, with loss of lives, while perennial irrigation slowly destroys fertile soils through waterlogging. In these examples, water surplus, not scarcity, is the problem. I think it therefore more fruitful to define the problem in terms of management and fine-tuning.

2 Scarcity - an economic problem?

This interpretation of management is not the way states and international institutions alike perceive the water problem. Water is, first of all, subservient to aims of development and growth, to which there are no stated limits. Dams, canalization and irrigation projects are set up to reclaim new lands, to open up 'backward' areas, to 'modernize' agriculture, to achieve energy self-sufficiency through the generation of hydropower. No trouble (large-scale resettlement) or expense (billion dollar loans, sacrifice of natural reserves) is spared to realize such dreams.

First, I will highlight the concepts of 'development' and 'scarcity', and confront them with different interpretations. If I interpret water management as a problem of development, I will have to choose from different concepts per capita revenue, on which basis the World Bank discerns low, middle and high income countries. It would seem sensible to me to include the 'human development index' (HDI) into the account, since that concept also takes care of non-material indicators of development, such as literacy. Without a high level education, self-sustained development would seem impossible (for Middle East indices, cf. Sadowski 1990).

Which is the optimal road to development? Classical economics recommends each state to exploit its 'comparative advantage'. The workings of the free market would promote all economies into industrialization. It became crystal clear, though, that equitable exchange between the 'core' and the 'periphery' is illusory. Some economies did not appear to develop at all, their role being reduced to supply of raw materials to the more prosperous nations. From this realization, various theories of development evolved, in some cases stressing the leading role of the state, in other states the need for a return to economic orthodoxy¹). In those conflicting perspectives, the time-honoured controversy of market and state, monetarism and Keynesianism was reflected. In practice, history has witnessed the Keynesian New Deal, with the Tennessee Valley Authority as its *piece de resistance*, being exported to South Asia, after which there was no holding back. However popular international free-trade ideology with international aid institutions (Ch. 5), the state-led model has proved to have a longer lease on life than expected. 'The decisive role of the state in the development of the newly industrializing countries is in no way peculiar; on the contrary, it appears to be the norm' (Harris 1986, p. 160).

3 Scarcity - a political problem?

Different perspectives explaining why economic take-off did not happen, (cf. Richards 1982, p. 257) all highlight elements which are important for the analysis of the problem. In discussing the water problem in the Mashreq, I therefore do not start from a single perspective, but combine a number of such factors²).

The integrating factor in my argument is the *political* element, personified by the *state*. The state will take centre stage as the main actor, initiating cooperation and conflict at home and abroad. I contend that these conflicts and cooperation efforts both influence the gravity of the perceived problem, and define the constraints within which solutions for the water problem may be found.

1.1.2 The Concepts of Scarcity and Development

In the sections to come, I set out to elaborate separately the notions of scarcity and development, which were interrelated above. It will first be clarified what constitutes my 'broad' definition of scarcity. Equipped with this stock-in-trade. I will return to the context for development, specific to the area.

- Scarcity

conceptions of scarcity

The way in which scarcity is defined determines the direction in which solutions are being sought. If scarcity is interpreted as a 'shortage of means to realize stated economic goals' attention and efforts would turn to better information, distribution management, and interstatal settlements.

But if the concept of scarcity is held to include criteria of efficiency, e.g. optimal yield per gallon of water, the picture looks quite different. It can be asked, then, if correct goals were set, that is, if benefits of industrial agriculture (foreign currency, employment) sufficiently compensated for opportunity cost, considering high rates of water consumption and poor world market perspectives, and, in several states, the need for imported labour. In this perspective, current water policies are the result of political and institutional structures, combined with external influences.

A third (own) interpretation of scarcity does not only take account of availability, but also of questions of who gets access to how much. Allocation of water resources, from this point of view, is subject to expressions of political and economic power.

Internally, the (unequal) distribution of land and price and subvention policies play a major part in the distribution of water within the agricultural sector. Unequal access implies taking away opportunities from the poor to escape dire living conditions, in other words, to develop.

Externally, in river basins, an upstream state controls the 'tap'. A position next to that tap gives ample room to hamper downstream development. Such induced scarcity is a political choice of one actor with regard to another.

efficiency and loss

I proceed by accommodating the line of reasoning developed above in a broad definition of *efficiency*, in which, apart from consumption, social and ecological efficiency are incor-

porated. If these aspects are insufficiently taken into account, many proposed solutions will give rise to new problems.

The concept of inefficiency, the logical reverse of efficiency, will be equated to 'loss', which implies, first of all, loss of potentially consumable water, but also, following naturally, of development opportunities.

Different modalities of loss reduce the practically consumable quantity of water. Absolute loss can be subdivided into evaporation (a consequence of solar radiation), transpiration (water taken up by vegetation), leakage during distribution and unused discharge into the sea or subsoil of precipitation and river flow.

Apart from this absolute loss, I would consider pollution and salinity a relative loss, since those processes either impair the quality of potable water and irrigation flow, or damage soil fertility. Water contamination, perhaps by toxic chemicals, may also endanger public health. Quality reduction therefore causes additional cost.

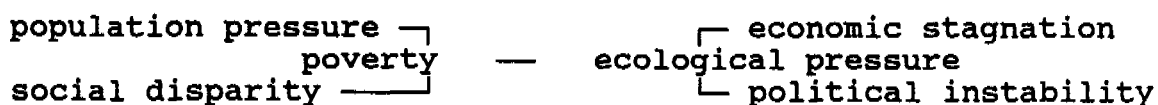
In terms of quantity, degradation of water quality may therefore, in my view, be seen to be reduction of usable quantity of water³). Such loss is not infrequently the consequence of inadequate planning, political or institutional factors, or carelessness or neglect (s. Appendix).

poverty and ecological degradation

I choose to extend my definition of loss by one more dimension. As I see it, poverty and ecological damage can also be interpreted as economic cost.

A simple argument (cf. Richards 1982) will clarify this position. Consider an agrarian society with a high rate of population increase, where two types of agriculture are being employed, one intensive monoculture and a traditional one, with a rotation system. In addition, land is very unevenly distributed, giving rise to a majority of small farmers and landless workers. In the modern sector, the soil will be exhausted over time through waterlogging and manure saturation. In the traditional sector, a lack of food, money and soils, due to fragmentation and population pressure, may also give rise to overexploitation of natural resources, so that in the long run, the production factor 'land' is degraded through salinity and erosion. A causal order of the problematic would look like this (time dimension running from left to right):

Diagram 1.1: Chain of misery 4)



The population pressure is notably felt in populous agricultural states, but a model resembling Diagram 1.1 could, but for one modification, also be valid for rich oil monarchies, which tend to be situated in parched areas. In such desert areas, the available quantity of water is small, and per capita consumption high (augmented by the consumption effects of wealth, s. Appendix), to such an extent that there is question of 'consumption pressure'.

Interactions obviously play a part. One of the above indirect relations concerns social disparity and economic stagnation. The concept of 'development' does not just imply growth, but also incorporates an element of allocation (Ch. 4). The two factors are, thus, mutually influential.

- Development

development on the basis of rents

In this section, I will consider the water problematic, interpreted as a development problem, in a structural context: the idiosyncratic nature of the region's economy, a type which the literature has termed a 'rentier economy' (Beblawi/Luciani 1987). Contrary to OECD countries, the most well-heeled Middle East states neither derive their affluence from industrial power and efficiency nor from human capital (cf. a post-industrial society like Japan), but from exploiting their monopoly of natural resources, a faculty agrarian Third World states crave.

This revenue, along with other types of rentier activities - management of the Suez Canal, tourism, receiving strategic foreign aid - brought the region a sudden accumulation of income. The Middle East therefore enjoys rent-induced prosperity, which created undreamt-of possibilities for development. Particularly for the population-poor oil states, there was the problem of how to absorb all these billions of dollars. It then turned out that the rent revenue was predominantly used for consumptive activities rather than for productive efforts. It is the very ease which characteres the generation of rents which tends to smother any initiatives of a more productive kind. Efforts at liberalization (Egypt, Iraq) have not been able to change this 'rentier mentality', a phrase coined by Beblawi (cf. also Ch. 2).

water as a precondition for development

Apart from 'consumptive' applications, water stocks are of particular import as a basic input for agrarian production and hydropower. even though these applications may work at cross-purposes (s. Appendix), large barrages are very often intended to serve both purposes.

This would seem a somewhat confusing observation, since it has just been stated that the state's record of allocation of its money resources to productive economic activities is disappointing - even though investment may be highly advantageous with a view to future tax receipts.

It has to be noted that there are some exceptions, though. Apart from petrochemicals, it is industrial agriculture which has received considerable investment of late, with a view to earning supplementary foreign currency.

It is true that large tracts of Mashreq soil have enormous potential for generating land rents, which is still far from realiation. The case of Egypt provides a fair idea: permanent irrigation makes it feasible for Egyptian farmers to harvest up to four times a year. It will be argued that such rich rewards come at a price, though. To start with, permanent irrigation obviously requires a cornucopia of water resources. Water-intensive agriculture banks heavily on the ecological sustainability (Appendix) and on social relations. For, intensive use does not just compete with other sectors for water, but with future generations as well. There is a question, then, if water-intensive agriculture is the right thing to spend funds on, and if so, if it ought to be promoted at all.

1.2 *Water politics*

1.2.1 *Water and control*

Below, it will be elaborated how water consumption patterns cannot be explained without paying due attention to state politics - but it is also apt to reverse the issue, that is, to question whether the state can be adequately discussed without due regard to the role water resources. The answer would seem to be in the negative. In several states, water has been a most decisive factor or precondition for the process of state- and nation-building. Egypt and Iraq (Mesopotamia) are the familiar historical precedents, whereas Israel and Saudi-Arabia serve as contemporary examples.

Wittfogel's suggestion to land a whole new type of development, the hydraulic society (Wittfogel 1959), has been sufficiently refuted by several authors (Luciani 1987 is one of them) to deny it much consideration. From a less presumptuous point of view, though, the present thesis will draw special attention to the role water still has to play in the Mashreq political economy, a role which, in my perception, is somewhat disproportional.

state aims

It will be indicated, then, how water resources, both in its pure form, as a generator of electricity and as a raw material for agricultural production, are influential in reaching **state goals**, both with respect to its citizens and fellow states. To that effect, a dichotomy can be established between what I like to call **first-level** and **second-level** goals. I therefore discern states that aim at first-level objectives, such as independence, order, stability, and states with farther-reaching ambitions: creation of a regional sphere of influence.

First-level goals, then, are concerned with survival and continuity (boosting and maintenance of legitimacy) at home and abroad, second-level goals are directed at dominance and hegemony, again at the domestic and the regional level. It would stand to reason to assume that domestic stability is a minimum prerequisite for realization of regional aspirations - yet, there is plenty of historical evidence indicating that states initiate adventures abroad to deflect attention from domestic problems, or where national interests are an excuse for a more repressive policy line. Such adventures, then, strengthen the legitimacy base.

As has been indicated earlier, water resources may serve as a means of pressure to lend force to regional strategies. This principle is even more valid at the domestic level. By allocating water to powerful interests, the state procures itself tranquility at home. The state may also use its water monopoly to influence domestic relations. A strong state may even try to alter the social configuration to serve its own interests, making for easier control.

legitimacy

The state generally sets itself up as a motor for economic growth (Ch. 2). In order to stimulate and modernize the economy, it will endeavour to gain ever better control of society. It takes an expanding army of public officers, institutions and means of coercion to reach that goal: the state expands. That again takes money, which would make taxation an increasingly appetising option, unless enough rent income is flowing into the Treasury.

Direct taxation, it has been observed time and again, goes at a political price, known as the axiom of 'no taxation without representation'. The state can only extract means from its citizens with impunity if it allows them a say in the spending of those means. Should the state refuse that participation, it will have to make use of any extractive means at its disposal (economic monopolies, violence), at a peril of encountering popular unrest. The state is therefore inclined to tap external resources: exports of tradeable goods and labour, and development loans. In order to secure such loans, there has to be some degree of internal and external stability (Ch. 5.2).

Stability and legitimacy do not always work well together, they may even work at cross-purposes. Opposition (threats to legitimacy) from within can be parried with physical violence, economic incentives (subvention, employment creation) and sanctions, or co-opted through reform, allowing some participation and enacting symbolic policies. Where regional threats are concerned, the option of 'participation' may be rephrased into 'negotiation and cooperation' and legitimacy into 'credibility'. Depending on the strategy chosen, states will try to fortify each other's legitimacy, perhaps through donations of positive propaganda, or to undermine it, by supporting resistance groups or making public slurs.

Hudson discerns three types of legitimacy:

- personal legitimacy (charisma);
- ideological legitimacy (calling on Arab, Jewish, Turkish unity, socialism);
- structural legitimacy (the network of loyalties extending into the hinterland).

In monarchies, family ties and religion are heavily emphasized (personal legitimacy). Republican regimes pride themselves on their heroic role in a war of liberation. This basis nevertheless proves to be insufficient: almost all governments in the region have to put up with a deficit of legitimacy. To compensate for this 'shortage' of legitimacy, states placate their population with *social security*: food, water, energy.

Extremely generous subvention of basic needs is, of course, not limited to autocratic states. They can also be exacted in liberal states through democratic institutions, or serve a 'higher' nationalist aim. But they, too may serve a hidden agenda: I will contend that subsidies can be an instrument to privilege or disadvantage specific social groups.

social configuration

Obviously, states do not find it as hard to satisfy their citizens' water needs in water-rich areas as they do in parched areas - yet, they, too, may use their water resources as a welcome instrument of power, by granting some groups and denying others access opportunities.

State efforts to modernize the economy time and again run up against fierce opposition: feudal relations and acquired rights. A high dam-cum-rrigation project endows the state with powers to divide and rule over a vast stretch of new territory, and to reschedule allocation preferences (Ch. 4).

It has to be noted, though, that the assumption of a coherent, pro-active strategy of state control in order to reach intended goals is somewhat questionable. State policies may well be reactive, 'panicky play', or a combination of the two. Whenever I describe 'effects', it will not always be possible to determine, through inferential reasoning, if these effects were intended outcomes. Even if states would devise schemes against certain groups, their faculty of bringing the plan to a desired conclusion are limited. For the sake of convenience, I will continue to speak of a 'strategy' (or: orientation) whenever a state seems to take coherent decisions leading to a particular effect. A strategy of control is, in this sense, a series of measures which impinge on social power relations in ways that result in better manageability for the state.

water - a tool of regional power politics

The natural preconditions in the Mashreq are different from most other regions. On the one hand, water supply is a very problematic proposition, for reasons of climatology, on the other hand, the region has a wealth of fossile minerals: oil and natural gas. The distribution of those resources across the Mashreq is very uneven. The geographical spread of both resources, water and oil, surprisingly, happens to be fairly complementary: those Middle East states that have relatively rich water resources at their disposal are also oil-poor, whereas richly endowed oil states tend to be poorly endowed with water resources.

As a rule, the state holds a monopoly of both water and energy exploitation. As scarce resources, both commodities constitute effective instruments of power politics, which both generate the same benefits: dependency, stability, foreign currency.

It is evident, too, that water is a valuable power resource in the region. Since rivers are the only vehicle for water into an otherwise parched area, where it may not rain for a whole year, upstream states in particular command the means to grant or deny other actors of access to water. Downstream states can only arm themselves against such schemes by buying off upstream partners' cooperation, binding them to quota settlements or threatening them (s. the section below).

Iraq is the sole state in the region to hold both fossil fuels and water in relative affluence (albeit in a downstream capacity with respect to the latter resource), and in recent years, it has tried to utilize this position by making special offers of water and oil to other states. In Chapter Three, I will examine how such offers may fit in with a hegemonial strategy.

The uneven distribution of resources across the region makes for varying points of departure from which to use them. As a primary goal, the state tries to get hold of all technological, economic and political means considered indispensable for meeting needs. States endowed with a water surplus may try to attain a second level, the faculty of using surpluses to attain political and economic dependence, to generate foreign currency or to get closer to other aims. States therefore use different means to reach goals of first priority, but may also use water resources as a means to attain non-water goals. These means will be taken stock of in the preceding section.

With a view to water possession it may therefore be advisable to start from a three-piece subdivision of 'water-rich', 'waterstandard' and 'water-poor' states. Although the demarcations between these groups are fairly arbitrary, it is justifiable to state that Turkey and Lebanon are surplus states with regard to water, whereas the Arabian Peninsula is poorly endowed with the resource. Israel is clearly somewhere in between - 'water-standard'. This subdivision could serve further research well, both for estimates of internal needs and deduction of external strategies⁵).

It is its very exhaustability which draws a time horizon to the extent to which water may be used as a political asset. For, within a couple of decades, the main freshwater sources will have dried up in several areas, perhaps even sooner than will oil stocks.

1.2.2 States' power resources

In order to describe the possibilities of attaining political and economic goals, I will have to investigate the means to those aims, as well as any counteracting forces. I will use my trichotomy of geographical levels to this effect.

The global situation roughly determines a modernizing state's room for maneuver. Sales prices of agricultural and energy product, international stability, IMF and World Bank conditionality are not autonomous, but are influenced, intensified, at times even created by 'core' states.

Regionally, another North-South relation may be observed of a more diffuse kind. Although various states battle for regional leadership, they are not powerful enough to decisively intervene in regional conflict.

At the state level, conflicts of social groups play a role, notably concerning conflicting modes of production and ownership. In the Middle East, these conflicts predominantly boil down to stand-offs between the state and social groups, since it is the state that acts as the main actor intervening in economic life, alternately stimulating it and jumbling it up through income transfers and development projects, and modification of economic structures.

I State

In this study, the state will regularly come to the fore as an undifferentiated moloch, which somehow has a will of its own and undertakes action accordingly. It is apt, though, to note that the state is not the same thing in all places; neither is it neutral in its interactions with society. There are interests which it cannot pass over, if it wishes to maintain its continuity. On the one hand, the quantity of available resources, including the human resource base (population), is bound to be a determinant of economic and political aims, on the other hand, those are shaped by internal and external interests.

Since it is impracticable to outline social and political relations within each of the states, I will sometimes cluster states, as suggested in the literature. The choice of which states to lump together is facilitated by two types of similarities:

1. Economic (cf. Katouzian 1979):
 - thinly populated oil states
 - populous agricultural states

The mode of production and the size of population are a possible indicator of the ways in which a state hopes to maintain its wealth: productive or circulatory strategies (Ch. 2), and hence, its international economic orientation.

2. Political (cf. Hudson 1977):
 - liberal democracies (Israel, Turkey)
 - modernizing monarchies (Arabian Peninsula exc. Yemen)
 - revolutionary republics (Egypt, Iraq, Sudan, Syria)

Since each of these labels, especially 'liberal democracy' is highly debatable, they should not be taken in a literal sense. Nonetheless, the form of government is a potential clue for land tenure and political participation. I consider relations among the state and social groups ('classes') an interactive process, in which each side moulds and influences the other, along the lines suggested by Richards & Waterbury (1990).

It will turn out that, with a view to the themes around which the thesis revolves, even obvious differences between these groupings are not as preponderant as they may seem. This could be attributed to the modest extent to which political pluralism has as yet developed in this region. The state seldom encounters oppositional groups posing specific political demands. Dissenters sooner rally around religious or ethnic/tribal themes.

Unequal access to means of production (land, water, capital) is almost bound to spark off a political confrontation between different 'classes', each having their own access to means of production and power. That such a showdown has not yet taken off is believed to be bound up with the (*induced*) *rentier* characteristic of the region's economies (s. Ch. 2). A confrontation could have a favourable effect on *political* modernization, which would take place through a process of political pluralisation, leading to tendencies toward democratization. John Waterbury terms a society where such a struggle is more or less absent, but where contrasts of ownership and means of power are glaring, a class-divided society (cf. Waterbury 1984).

II Region

To make the region more 'manageable' in terms of water possession, I use states' geographical location with respect to international surface flows as the factor most prone to give rise to international conflict. This location endows a state with significant powers or weaknesses with respect to riparian neighbours. An upstream state can reduce, even shut down downstream states' supplies. This instrument of power may be used to exact concessions in a different area. Therefore, I subdivide the region as follows:

- upstream states;
- downstream states;
- 'no-stream' states.

In order to describe regional power relations with regard to water resources, I will examine to what extent water wealth compensates for other means of power: oil wealth, funds, military might, diplomacy, technical assistance, loyalty to a patron.

I would suggest that these forms of power derive from an international rent structure. Just like water, oil is a god-given resource which a state can or will soon be able to turn into good money, as a rent generator. Oil has a high intrinsic value, due to its importance to the world economy. Money is an effective tool of diplomacy ('carrot') to impose order on a restive region, and is used to purchase technology from the West, or arms. Where financial dependency does not work, money will be used to build a strong military force ('stick'). Lack of manpower can be compensated for with expensive technology. Suppliers stand in line to deliver those goods. The help of a powerful patron however, be it a regional power or a superpower has shown to be an indispensable asset.

III World

At this level of analysis, I will focus on: international alliances, international loan and aid institutions, the global agricultural market and the global energy market. Here, power assets are: market power and friendly relations with a superpower.

Geopolitical interests and oil assets increase chances that strategic rents are supplied, in other words, chances of being eligible for handouts at little sacrifice, on the basis of geographical or geological location (that is, on top of fossile resources). States that lack such a fortuitous location, will have to throw in a measure of unqualified loyalty to get the desired funds out of potential donors.

Agricultural and energy markets determine the maximum amount of funds derived from exports. The degree of self-sufficiency limits dependence on imports, and therefore foreign currency. International credit institutions do not grant loans to projects which are controversial in the region. The easiest way to frustrate upstream states is to make public threats of military attack on the building site, a strategy which has proved to be liable to make the World Bank think twice before giving the project the go-ahead.

1.3 Brief outline of the following Chapters

In conclusion, the themes I plan to elaborate will be outlined, in as far as these have not been fully explained above.

2. The State

In this Chapter, with the help of theoretical insights on the concept of the 'rentier state', the basic orientation of states in the region will be elucidated, taking note of internal and external interests. Tentatively applying some theoretical achievements of the Amsterdam Regulation School of 'concepts of control' both to states in the framework of a regional 'rent structure', the relation between those actors' interests and state orientation will be explained.

3 and 4. Strategies

In accordance with public administration theory - aims, means, preconditions and effects - I will sketch the role water supply has to play as an objective in itself and its possibilities and limitations in achieving other state aims. Furthermore, the Chapters will describe the ways in which water serves state strategies: internally, to gain and retain legitimacy and modify social configuration in accordance with those aims, externally as a showcase for state power or to strive for hegemony or dominance.

Chapter Three will not just examine tactics of power politics, it will also discuss several proposals for regional cooperation, while Chapter Four discusses factors that explain the failure of many (agricultural) development projects.

5. Finance - the Water Budget

In this Chapter, I will examine the funding of water projects, First, I will discuss a number of cost-increasing factors, whereafter I will look at sources from which to derive the financial means to pay for them. The choice, or even the need for domestic (taxation) and external sources (loans) will be dealt with, in relation to the problem of legitimacy and social disparity.

6. Summary and Model

The information which emerges from preceding Chapters will enable me to paint the picture of the most ponderous dimensions and aspects of the problem scarcity. This overview in turn offers handles for developing criteria for solutions. In various articles, solutions are reported which may or may not contribute to counteract the problem. With the help of concepts as enumerated and developed above, I will argue that effective solutions are hardly attainable without uprooting current domestic and/or international political and economic structures. As will be explained, the level of the solution being proposed will have to match the problem level.

Finally, an *Epilogue* looks at the road ahead, sketching three scenarios for the future, and discusses the latest in a row of regional solutions, the Wachtel Plan.

Notes:

- (1) These can roughly be summarized as follows (Cf. Barnett, Ch. 1; Harris 1986, p. 21):
- *Harrod-Domar model*: accumulation of savings to promote economic take-off; border protection of imports;
 - *progressive model*: greater degree of centralization and upscaling of the economy, strengthening and technological improvement of the state apparatus; measures to boost consumption;
 - *model-Frank* and variants: detach the state from the world economy; socialist revolution, based on the weakest social link; import substitution.
 - *neoclassical economics*: economic liberalization, reform of (national) economic structures, such that prices correctly reflect global conditions of scarcity.
- (2) A selection from leading theoretical approaches:
- orthodox-liberal*: internal cause - ecological conditions, lack of entrepreneurial spirit, price distortions;
 - Dependencia*: external reasons - international trade system impedes growth structural change and technical development;
 - Marxist*: semi-feudal class structures, sluggish development of wage labour, and therefore, class consciousness.
- (3) Apart from physical and qualitative loss of water, I take uneconomic use of water to be a form of loss. Again, efficiency is not a unequivocal concept. Israel's use of its water resources can be considered technically up-to-date, since it employs advanced types of irrigation, has a clever system to catch surplus precipitation, and utilizes all available resources. A 'Calvinist' interpretation of frugal use would be very critical of exports of water-intensive crops in very arid areas. A more flexible analyst would still point at many forms of 'conspicuous waste'.

The nature of water use determines whether water is being 'used up' or 'consumed'. Industrial water, though reduced in quality, may be recycled within the sector. This is not so easy for agricultural use, if only because it has been taken up and polluted by crops. The efficiency of water use may therefore be judged (on a continuum) in these terms:

* useful utilization - useful consumption - uneconomic utilization - uneconomic consumption - downright waste

Thus, economic inefficiency, judged by standards of economic use, utility, and feasibility of reuse, is a measure of economic loss.

(4) I reckon operationalization of the above concepts could be set up along these lines:

population pressure:	land per capita
disparity:	differential high/low revenue, large/-small holding
poverty:	percentage below poverty line, HDI.
ecology:	a.o. acreage of fertile soils lost annually
economy:	GNP growth

(5) The division is also highly conjectory, since there is no connection of water resources to needs. These, it would seem, do not just relate to the size of a population, but also to its level of modernization.

appendix

DEMAND FACTORS

In semi-arid areas, the agricultural sector accounts for 80 to 90 per cent of water consumption. This observation is just as valid in California, USA as it is in Egypt. But obviously, demand for water is felt to be a more nagging problem as population pressure increases. The Middle East population increases at an exceedingly high growth rate, which ranks among the highest in the world. This rate automatically corresponds to food demand, for which water is a key input. Whereas an annual rise of 1-1.5% counts as tolerable, since annual increase of agricultural productivity should be able to keep up with that rate (Richards/Waterbury 1990), the normal Middle East rate amounts to some three to four per cent per annum.

These figures must be seen in relation to a rising 'water civilization' spreading across the area. There is an increasing availability of taps and water-guzzling consumer goods (washing machines, garden sprinklers, golf sites), particularly in the oil-rich states, where a notable preference for 'conspicuous consumption' has been observed (cf. Ibrahim 1982). Thus, the perspective on water as incorporated into culture changed. While it used to be perfectly normal to content oneself with one bottle a day while trekking through the desert, there was a perception of scarcity; nowadays, there is a perception of water affluence, facilitated by extremely low water rates.

Two phenomena which are closely related to modernization, industrialization and urbanization, also impinge on water use. Whereas industrial use has not really 'taken off', urbanization is a major problem in all states. Not only is there an insufficient number of jobs, water management is a problem, both in its supply and disposal aspects. Moreover, expansion of cities following from rapid takes away tens of thousands of fertile soils from agriculture - which is beleaguered from two sides, since intensive practices have already resulted in the salination or absolute loss of vast areas.

Land use

Since agriculture amounts or such high percentage of total consumption, it would be proper to take a closer look at agricultural needs.

As the acreage which is available per capita dwindles, and methods of cultivation are intensified as a consequence, land reclamation projects look an ever more appealing prospect. Apart from absolute demand, there is considerable variance of water intensity among crops. Water consumption is highest for citrus fruits (7500 m³/ha/y) and vegetables.

Cereals and palm trees have a much lower demand. Different considerations play a part in the eventual decision on a crop:

- *Cost of production* for crops which require large inputs of water or nitrogen are as barrier for small, poor farmers. Richer farmers dispose of much better means to get hold of water and fertilizer supplies. Wealth secures better access to credit state services. A certain hierarchy seems plausible: access to land - to funds - to water.
- *Land demand*: if a product yield comparatively low returns, it can be said to guzzle land. The farmer, who has to utilize every inch of space, literally has to make the most of his cultivation. Land scarcity, then, promotes the choice for more remunerative, input-intensive cropping.
- *Opportunity cost*: In extremely parched areas, with marginal lands, so that prospects for agriculture are meagre, opportunity costs of cattle farming are negligible.
- *Hedging*: Subsistence, dry-farming agriculture (dependent on precipitation) has to hedge against crop failure. The subsistence farmer, then, will make use of less intensive, durable and preferably consumable cultivation.

THE NEED FOR INTEGRATED MANAGEMENT

Loss

a. irrigation

In the Framework. I have indicated that water management is not so much a problem of absolute availability, but of fine-tuning. The water balance is a very important gauge and yardstick. Traditional irrigation methods, however wasteful, 'were not so inefficient as to cause a noticeable decline in the groundwater reservoirs' (Townsend 1977, p. 22). Nowadays, however, all Middle East States stand accused of 'mining', that is, depleting non-renewable resources and exploiting those sources which do regenerate at a faster pace than their rate of renewal. Over time, this practice may be characterized as destruction of valuable capital.

In the Mashreq region, dry-farming and irrigated agriculture are practiced side by side. The most productive short-run form of irrigation is also the most risky one. For, perennial irrigation implies excess supply, causing the watertable to rise, taking salts with it, eroding productivity over time. Tens of thousands of hectares are lost annually through waterlogging and salination, a loss which could have been prevented through adequate drainage.

Both Syria and Iraq discovered only too late the indispensibility of a drainage system. Egyptian farmers, too, were only convinced with difficulty of the need for drainage, which they feared would take another slice of their precious, scarce landholdings. Reasons of finance and space, then, accounted for lax drainage investment.

b. damming

For the benefit of agriculture and settlements, the vegetation that holds together soil structures is systematically being removed. This soil coverage is transported by rivers, which diminishes water quality and clogs irrigation canals. But barrages hold back these fertile silts, so that a shortage of minerals occurs behind the dam, which has to be compensated for by fertilizer application. The sediment-free water let through by dams receives a palpable impulse, which contributes to erosion of the river bed behind dams.

Damming and reclamation constitute a radical exchange in the ecosystem, since humidity rises in a formerly dry area. The natural habitat for flora and fauna changes as humidity increases, giving rise to water-related pests: locust, snails and insects, which transport communicable diseases severely damaging affecting human health. The next section will discuss how human life is affected by changes in the river regime.

User interdependence

Apart from an atmospheric cycle, water passes through a subsurface cycle as well. River flow is diverted for irrigation, whereafter it is drained back, polluted and salinated as it is, into the flow. In the major basins, the flow diverted by riparian states may be so great that downstream users are left with nothing but a trickle. The biggest gluttons are artificial lakes. Since those reservoirs are exposed to solar radiation, evapotranspiration (leakage and evaporation) accounts for much of the loss. In most Middle East areas, such loss is in the 570-1140 mm per annum bracket, but figures for Egypt and the Arabian Peninsula are much higher (Beaumont/Blake/Wagstaff 1988, p. 74).

On a micro scale, farmers, too, hold relatively upstream or downstream positions in relation to irrigation canals. A downstream user is dependent on the quantity and quality of water let through by upstream users. As for ground water, the user who has the means at his disposal to bore deepest has the means to deprive all other users in his vicinity of freshwater sources.

Once the decision for the construction of a waterworks has been decided on, the ppls n seems to give rise to unfettered optimism. As a result of overly optimistic estimates of river flow and ignorance of upstream projects, hydropopwer turbines turn out to hold excess capacity or display unforeseen interruptions, while crop failure due to insufficient supply is seldom anticipated as well.

Even downstream states themselves do not seem to take into account waterworks which are in progress upstream, or of consequences of their own megaprojects taking effect even further downstream within their territories. Excess capacity, and the resulting loss of funds, land and water, and lands (due to overly optimistic calculations of demand for agricultural products) is a factor which cannot be underestimated.

Cognizance of such realities would enhance the reasonableness of those who advocate dealing with the river basin as a whole - and its integrated management (e.g. Payer 1982, p. 246-7). Yet, as we have seen, even if the basin is located within the boundaries of single state, such integrated governance is still exceptional. The observation that even 'international loan or fund granting agencies (...) have always been more willing to give financial support to what appears to be a simple, well-defined and relatively easily costed project (...) rather than become involved in the broad and often costly intangible problems of river basin management' does not offer much hope for management to improve (Beaumont/Blake/Wagstaff 1988, p. 98). Chapter Five will discuss these aid agencies' function from a political point of view.

Chapter 2: The Rentier State

- 2.1 Introduction
- 2.2 State position
 - 2.2.1 The state and the market
 - 2.2.2 Intervention, distribution and development
 - 2.2.3 Economic development: state and structural transformation
- 2.3 The spreading of distributionism
 - 2.3.1 Whence distributionism?
 - 2.3.2 Domestic configuration of interest
 - 2.3.3 Labour migration as the vessel of the (induced) rent economy
 - 2.3.4 Rentier state, mentality, economy
- 2.4 Productionism for survival?

2.1 Introduction

Just what constitutes the 'really existing' Middle East state, if states should be there at all, and if they have the capacity to act for themselves or not, is a problem which has given rise to a surprisingly small body of literature, yet appears to be subject to emphatic convictions. Scholars of a panarabist inclination contest the right of existence of the Arab state itself as an historic anomaly, a 'diabolic invention' of Western colonial powers invented to divide a once 'unified' Arab nation. Marxists of various breeds insist on viewing the state as the instrument of a dominant class or indeed the arena of class struggle, whereas another left-field scholar, Richards, argues that industrial development in the Middle East has been of such embryonic scale that class consciousness has failed to develop as yet. In real life, though, the state as an institution appears to be very much alive and kicking, while there is little evidence of it giving way to Arab unification; in addition, this study aims to demonstrate that states even pursue their own goals.

But note that a Middle East state is not your average run-of-the-mill state. Neither the autarkic production state type (say, Brazil) nor the sell-out export state (e.g. Burkina Faso) appears to be very applicable to the Middle East state. It would be preferable to make room for a specific intermediary type.

This Chapter, then, will typify the state in the Middle East as a particular type of state, which, albeit in varying modalities, can be said to have gradually spread across the region: the (*induced*) *rentier state*. A class of its own, the *rentier state* type is, in fact, a continuum, ranging from a 'pure' *rentier*, the *portfolio state*, a financial island of 'circulating capital' recycling oil to a *semi- or induced rentier state*, which, due to its symbiotic economic interconnection with the oil economy, derives a sufficient percentage of its income from foreign loans and donations to interfere with its economic structure viz. its political outlook.

Apart from the singular *rentier* character of its revenue - the 'input' side -, the (*semi-*)*rentier state* is notable for its 'output': a (*re*)*distributive strategy*, impinging on relations of dependence and questions of legitimacy. By terming the economy '*(re)*distributive', I mean to capture how the state off-handedly allocates its income in such a way that it generates popular support, rather than invest it in a coherent way. State expenditure is of a consumptive, rather than a constructive kind.

In addition, the state's position *vis-a-vis* society is highly autonomous. To the extent that there is a form of public participation at all, it is all but ineffective; several parties are simply forbidden by law (in Egypt, for instance, the Muslim Brothers) whereas in other states, National Assemblies are not infrequently dissolved as soon as they are convened.

The impact of *rentier* income on political relations in state and region is overriding. I am inclined to subscribe to insights presented by the likes of Abdel Fadil (1987), who interpret the choice for a distributive economy, implying a services-dominated economy, as a *consequence* of converging internal and external influences: on the one hand, world-wide dominance of finance (trade, insurance, banking sector), on the other, domestic relations, which are partly created by the state itself.

Following the relevant literature (Richards/Waterbury, Luciani/Beblawi) I consider this inflow of revenue as a *determinant* of:

- 1) the - changing - predisposition of the state (directly and indirectly), e.g. on the question of import substitution vs. liberalization) and the region;

- 2) the (creation of a) configuration of interested actors. In describing 'the Mashreq state', I am about to encounter two theoretical problems, the first of which being the problem whether the reasonably well-documented historical extremity of the ideal-type oil-rent state should take centre stage, or if the more common, but more diverse type of semi-rentier state, ought to receive preferential treatment. I will endeavour to give this question a satisfactory twist by starting from the description of the 'pure' oil-rent type of state, working towards the more regionally prevalent induced rentier state.

A second hub concerns the scope of the state. According to Alfred Stepan (c. in Evans a.o. 1982), the state is 'more than the "government"'. It is the continuous administrative, legal, bureaucratic and coercive systems [sic] that attempt not only to structure relationships between civil society and public authority in a polity but also to structure many crucial relationships within civil society as well' (p. 7). Contrary to the state, the regime in such a state is the current set of rules and norms governing the policy-making process. It is true, though, that the concept is also employed in a more specific sense, that of the present leadership, carrying a distinctly derogatory connotation. In this study, a related concept is also of import, that of 'orientation' which is the political and economic outlook of a hegemonic group. It is to this notion I will now turn.

2.2 State position

In characterizing the state, the question arises about the extent of autonomy it can maintain with respect to internal and external actors. The issue revolves around the question whether the state is the 'instrument' of domestic, societal, or external, transnational elites.

In this autonomy debate, the Middle East state appears to hold an exceptional position. A striking aspect of the Middle East state, as Richards & Waterbury (1990) contend, is that such domestic elites have been created by the state itself: 'It is our contention that the Middle Eastern state (...) is best seen as the instrument of its own personnel, and that it is in their interests to ensure that the state continues to control as much of the economic resources of the society as possible (...). The somewhat disembodied politico-military power of the state can be used to allocate resources in such a way that new interests are called forth (...)' (p. 38). There is no question, then, of interplay of state and society: a Mashreq state, and doubly so if it is an oil state, operates dissociated from societal groups, yet it is a dominant, interventionist economic actor (p. 22).

As long as the state sees to it that there is sufficient money available, the state will expand, and citizens will refrain from raising awkward issues. Rents are, thus, politically centralizing forces which 'delay hard development choices' (p. 16).

A tripartite alliance

The dominant configuration of interests in Middle East oil states can be depicted as a 'tripartite alliance' of the state, the private sector and international finance (Abdel-Fadil 1987), which are all much interested in different modes of rent recycling. On a domestic scale, this recycling results in secondary rent income from construction projects and transfers of money (subsidies) and land (grants), giving rise to a new 'business elite', thriving by the continual creation of fresh projects. At a transnational level, the state places its money in productive enterprises, joint ventures and speculative investment (notably Kuwait), and depends on the international capital market for funding of its immense import and projects bill.

This is where extraregional interests come in. It will be clear that extraregional interests have a lot to gain from regional stability and liberalization. As highlighted by the Gulf War events, the area is still considered to be of paramount military-strategic importance, both for its geographical location (Suez Canal, Persian Gulf) and its raw materials (oil and gas). That aside, it is an important market for commodities such as food and technology, a money market, and, lest we forget, a huge importer of arms. For the receiving side, the former commodities serve a capital-, energy- and know-how-intensive development (Luke 1985, p. 42), whereas the purchase of weapons is intended to withstand both domestic and external forces - in the modernizing monarchies, these concerns are directed, not in the least place, at potentially destabilizing ideologies, such as socialism and democracy (*ibid.*, p. 39). The resulting democratic deficit in turn is taken for granted by the international banking community, since, to them, authoritarianism seems infinitely superior to democracy, in terms of stability (cf. Ch. 3.2).

2.2.1 The state and the market

So far, I have identified the position of the state with regard to domestic and transnational interests, but I have not yet discussed the delineation of state and market territory, another prominent tenet of political science. To what extent is the state allowed to interfere with the market?

The collective of political scientists which is often referred to as the 'Amsterdam Regulation School' assumes that a dominant coalition of (capital) fraction rules in every state, having a more or less clear-cut conception of the 'common good'¹). Any oppositional groups can be co-opted by embedding their economic interest in the broad vision (concept) of the state's future. Such 'concepts of control', I gather, would encompass at least the following dichotomous themes:

- protectionism / liberalization (*infitah*: open door)
- regional trade / international trade
- modernization / conservation of traditional values
- investment in income-generating / income-spending activities

One dichotomy however is notable for its absence in this region: **state and market**. True, as for the relation between state and private sector, two different basic strategies are pursued, two growth strategies or 'processes of accumulation':

1. *the state services the private sector, transferring surpluses and rents on the private sector. This is the 'handmaiden' strategy practiced by most Mashreq countries.*
2. *the state services itself, dominating all resource mobilization and infrastructural development functions: the 'strangulation' strategy pursued by Lybia, Syria and Iraq. These last states are ruled by a dominant coalition subjugating the private sector to the state, the party and the plan' (Richards/Waterbury 1990, p. 214/5).*

Yet, even those states pursuing a policy of liberalization and privatization are showing precious few signs of a significant lessening of state influence. If the role of the state is so undisputed, there have to be quite a few domestic (as well as transnational) groups which benefit from the allocation character of the rentier state. Notably the role of state enterprise (agriculture, industry, defense) remains essential, since most sectors consider the continuation of the current situation to be in their best interests.

2.2.2 Intervention, distribution and development

I will now focus on the nature of state intervention in society. If the state's dominance is so undisputed, is this because of the state's resounding successes as a motor for economic growth?

Not really.

Where the state has secured itself access to rents, it makes use of that access with a view to expanding its activities. A most helpful concept to that effect is the feeling that the economy derives its 'backward' status from colonial experience, which caught the region in an 'agrarian trap'. Only the state is seen to be capable of breaking out of this trap, for want of the slightest bit of faith in the bourgeoisie's capabilities of resource mobilization and planning, '..(g)iven the historical weakness of the domestic bourgeoisie in promoting industrialization', Moghadam 1988, p, 29.) Regardless of ideology, Richards and Waterbury note (1990, p. 187), states' justification of interventionist policies invariably lies in avoidance of wasting scarce resources - efficiency - and combating social inequality. So, in order to set the desired development effort in motion, it calls to life gigantic development projects, to be implemented by state companies.

Thus, on the face of it, the state seems actively involved in economic development. As it happens, the state's presence in society is manifest at three levels:

- as a provider of an infrastructure;
- as an allocator of state subvention;
- as an economic agent, initiating and dominating investment, production and employment (Chatelus 1987, p. 110-111).

Yet, it seems to me that these interventions are best seen to be three sides of the same prism of spending programmes, meant to continue a shaky legitimacy.

Sadly, said development projects tend to be badly planned and intercoordinated. This is an unfortunate outcome of the state's distributive mission, making for an uneasy go-together of distribution and development. To me, this seems a fitting example of how the state approaches what Chatelus calls a 'strategic puzzle', when he posits that for a rentier state, economic development is a 'way of solving strategic puzzles', instead of an aim in its own right (Chatelus 1987). Highly visible projects may serve to let the population know the state it cares - it renders it a progressive image.

2.2.3 Economic Development: state and structural transformation

As was described in the above section, it is my contention that the distributive nature of the state is of far-reaching consequence to the purposes, and hence the effectivity, of development projects, say in construction and exploitation of water resources, which will be a recurrent theme in chapters to come. As a result of such spending activities, most labour and capital disappears into the services sector. Various explanations may be adduced for this variety of 'Dutch Disease', but they all lead to a single conclusion: too many means are transferred from traded to nontraded goods (Richards/Waterbury 1990, p.13).

Growth relations among sectors during a process of modernization are unstable by definition. Modernization almost by definition implies that the agrarian sector is reduced in favour of industrialization (which has higher per capita productivity) and urban growth. Deutsch has termed this phenomenon 'structural transformation' (cf. Hudson 1977).

Even by the flexible standards of this common line of development, though, relations between economic sectors have still left much to be desired in the region, especially those of agrarian and industrial development. Since oil income was abundant enough to pay for imports, the agrarian sector used to be neglected until recently, giving rise to an outflow of rural labour into the cities.

The effects on pure (oil-rich, people-poor) and induced (agrarian) rentier states however were different in some respects. Because of their small populations, oil states are in a position to distribute rent income in an 'egalitarian' way, thus evading social conflict as structural transformation progresses. This is less so in induced rentier states. In those countries, a significant part of rent income is made up from loans, which are often in some way 'tied to development programs favouring important segments' (L. Anderson 1987, p. 10). This point will be taken up and elaborated in Ch. 5.

It is apposite, then, to focus on the *origins* of the distributive state in the region at issue.

2.3 *The spreading of distributionism*

Whence distributionism?

In attempting to explain the state's distributive nature, a case can be made that this stems from traditional, tribal roles. Tribal rulers would grant their subjects benefits in order to buy their support. From early times, monarchs delegated control to latifundists, who remained dependent on kings.

Land reform policies impaired, but did not break their power to such an extent as happened in Europe. Their net impact was to add new strata of landowners to the power structure: owners of medium-sized property.

Before the advent of colonialism, the states of the Middle East were a variegated lot, ranging from the centralized, bureaucratic state of Egypt to the assembly of nomadic tribes migrating through what was later to become Saudi Arabia. Statehood in the Weberian sense involves administrative and extractive capacities, and the monopoly of violence. However, most societies were patrimonial, while territorial boundaries were rather fluid. Western imperialism changed all that. In order to resist invasion, in some areas (like the Ottoman Empire) the governing elite reformed their system of government, giving it the appearance of a European state. This is what might be termed the first wave of 'defensive modernization'. Efforts to aid religious minorities (Christians and Jews), politically induced changes of administrative policies and drawing of borders in the Fertile Crescent left the region with incomplete economies (Jordan lost its sea port to Israel) and disrupted social structures (by treaty, the Kurdish people were dispersed among four or five host states). As the Europeans left the region, they had divided up the Fertile Crescent, and sowed the seeds of Israeli-Arab antagonism and inter-Arab territorial and water disputes (Ch. 4).

It is certainly taking things too far to insist that the Middle East state, or even the Arab state, is nothing but a Western concoction, imposed on the region as a deliberate disruption of the Arab nation, as some would like to have it (cf. Salame 1987). But it cannot be denied that the European '(i)mperialism of interference without responsibility, which would neither create nor permit stability', greatly contributed to regional disorder and lack of state legitimacy (Anderson 1987, p. 5).

The figure below summarizes and classifies the different origins of Mashreq states.

* Fig. 2.1: The Mashreq state: historic origins
(from: I. Harik - 'The Origins of the Arab State System' in Salame 1987)

Imam = Chief-system:	(religious dissenters) Yemen, Oman
Imam + Chief:	Saudi Arabia (to some extent, Oman)
Trad. secular:	Lebanon, Yemen, Kuwait a.o.
Bureaucr.-military:	Egypt (as well as the Maghreb states)
Colonial creation:	Iraq, Syria, Jordan, Israel (Lebanon)

Modernization from above was initiated by the Arab socialist states, both with a view to gaining a greater extent of state control and penetration into society and to counter the rise of an independent-minded private sector, which in the long run might threaten state stability (cf. Anderson 1987). However, since the state appeared inadequately prepared for the responsibilities it had taken upon itself, it had to allow for a limited degree of liberalization (*infitah*), creating some room for an independent private sector (s. BOX 2.1, 2.2).

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| BOX 2.1 | Infitah and extra-regional interests

As I pointed out earlier, *infithah* seemed more like a necessity than a voluntary decision from the part of states. The ability to lend and invest money however inevitably required a great degree of financial liberalization. At a loss for alternatives, the state agreed to open up the door to the flow of foreign funds, foreign finance (*infithah* means economic 'openness'), albeit in the hope of keeping control of the foreign guests. Examples of *infithah* are the creation of free zones and the sale of productive capacity. Last year, Algeria was so debt-ridden that it opted for the latter of the two, offering a quarter of its largest oil field for sale, an act which, it should be noted, was denied later, cf. Aarts 1992). This desperate alienation of economic capacity, call it denationalization of 'productive' (in this case: rent-generating) assets would have gone some way towards a wholesale sell-out in the vein of Thatcherism (cf. Overbeek 1990, for an in-depth analysis of Thatcherism). There is no compelling reason to believe, though, that the Mashreq states are as yet ready to open up their doors too wide. ***

| BOX 2.2 | Liberalization and state control in a liberal-democratic state

The example of Turkey will be employed to clarify what is meant by a rentier mentality permeating the region, regardless of the political structure of a state. Turkey demonstrates the feasibility of simultaneous liberalization and maintaining a key position in economic life through distributive policies. It does so through oligopolistic state enterprise in key strategic sectors such as electricity, fertilizer, paper and cement, and disposal of large amounts of money (off-budget funds), aiming both to maintain the present center-right coalition based on the business sector, please every sector which does not benefit from liberalization and to compensate any victims from economic liberalization (rural sector) and allies who command larger stocks of votes than they do themselves.

The much-vaunted GAP project (see also Ch. 4) is an example of a public spending program to 'alleviate some of the public strain'. Business tolerates these spending programs with a view to upholding stability (Waterbury 1992).

As a relatively liberal democracy and a non-oil production state, one would least expect Turkey to have a ponderous state sector. As Waterbury rightly notes (*ibid.*), the case of Turkey is typical of several developing states, and, it would seem, even more typical of the distributive strategy as described above. ***

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In addition, the conservative Gulf regions felt compelled to perpetrate a virtual second wave of 'defensive modernization', this time to repel any popular Communist and democratic sentiments which might threaten monarchical business-as-usual.

2.3.2 A domestic configuration of interests

With all its distributive activities, the state does create powerful groupings which keep an avid eye on their acquired rights, and in so doing, greatly confine the state's room for manoeuvre. State intervention in this sense creates a form of state capitalism, with a 'state bourgeoisie' as its top stratum, a dominant elite in control, but not in possession of the 'means of production, distribution and coercion'. Apart from this upper stratum, the state functions as a patron of several *clienteles*, which compete not for control but for favours (Anderson 1987, p. 11), but who are ready to defend their interests should state support ever fall away.

Which are the domestic groups which benefit most from the continuation of the present allocation character of rentier states?

- 1) the oil industry, the state's taxmen. Instead of taxing its own citizens, the state, through the oil industry's structures, taxes its foreign customers. Since the industry is of the capital-intensive kind, its work force will never constitute a significant percentage of total labour. Hence, the industry is a patently controllable factor, and is handsomely rewarded for its good offices for the maintenance of state income;
- 2) state personnel, which in exchange for small effort, gains job security and income, although it is true that most public officers keep up side jobs to compensate for meager pay;

- 3) *business families*, who secure contracts for development projects and/or control foreign trade;
- 4) a new echelon of economic, financial and political 'lubricants' (lawyers, financial analysts, lobbyists), arising on the trail of international income transfers (cf. Beblawi 1987);
- 5) all nationals have the opportunity to turn their citizenship into rents, whenever they serve as intermediary for immigrant workers and enterprises (*kafil*). their citizenship is an (induced) rent-generating asset. As a consequence of protectionist legislation, migrant labour and foreign enterprise can only exhibit economic activities through the (remunerated) mediation of a citizen.

2.3.3 Labour migration - the vessel of an (induced) rent economy

This latter point deserves explanation.

The domestic population of oil states are insufficiently equipped to handle the technology and skills that modernization requires. As a matter of fact, there is no need to learn these skills, since there is abundant money to pay for skilled foreign workers and technology. Since they are offered better income opportunities than they ever would at home, millions of workers have been attracted to migrate to oil states. The states however see to it that these foreigners remain outside of society. As political actors, the workers are carefully segregated from the natives, and deprived of any channel of political expression. When economically or politically opportune, migrants are made redundant and sent back to their home country. As the seventies progressed, labour migration expanded so rapidly that their revenue became a significant and influential factor in their home economies. In so doing, along with revenue derived from intraregional loans and donations (cf. Ch. 5), distribution of rents spread across state boundaries, and, to a certain extent, so did the rentier (distributive) mentality, which will be discussed below.

The dominance of an economic outlook in one group of states impinged on the nature of economic development in others. Those who, to continue the metaphor, profit from the rentier economy in a *downstream capacity*, in the form of unrequited transfers from labour migration and pan-Arab aid transfers, use it as a safety valve for the problem of surplus rural labour and poverty-stricken areas. The allocative strategy thus spread throughout the region.

Rentier state, economy, mentality

It is instructive to pause at how the rise of oil revenue impacted on the region. *Rentier* money, partly spent on regional labour, contributed to the integration of the economies of rich and poor states, creating a *rentier economy* in the process.

Due to this development, states which used to display traits of productivism lost any impetus to pursue a development strategy and turned into distribution states of a sort: induced *rentier* states. Yet they are very variegated among themselves. Whenever subsequent discussion refers to *rentier states*, then, it has to be conceded that is in fact a term of convenience, referring to a spectrum of various stages and appearances of 'redistributivism'. For general applicability of the *rentier state* concept, one has to go by Beblawi's notion of a *rentier mentality* pervading the region, an observation which seems as valid as it is vague. The concept will show itself to be quite relevant, though, when I come to discuss the ways in which states handle both the states' financial and natural assets, water counting among the most essential resources.

2.4 Conclusion: *Productionism for survival?*

Someway, somehow the state will have to embark on a productive strategy, if only to survive. While the state is still poor, it necessarily has to have a small State, as Beblawi and Luciani plausibly demonstrate: the funds the state can extract from its citizens, i.e. the tax base, is too meagre. The relative size of the state and the structure of income is a function of the level of development (Beblawi/Luciani 1987, p. 8).

The state therefore is bound to benefit from its own efforts to initiate industrial or agrarian development projects. When such projects start to pay off, part of revenues flow to the state, which uses such funds to fortify itself against inside and outside oppositional forces (*ibid.*): it pays for defence and expenditure and consensus- or loyalty-creating subsidies. The idiosyncratic feature of a *rentier state* has been the lack of a need to appeal to the citizens' self-denial to pay for such projects, which, therefore, are likely to meet with little resistance. This explains the *rentier state's* remarkable stability (Amin, cited *ibid.*, p. 10). One could conclude that a state will be tolerated while it does not appear to be overly demanding: its legitimacy derives from *non-interference*.

However, once the sources of rent dry up, which they will some-day, or whenever a state decides it is time for reform, there is no room for non-interventionist aloofness. Whenever a state actively perpetrates modernization and developmental projects, one group or the other will suffer. Political or social friction will arise.

Add to this observation that the state organization is usually inadequately developed, and that technology or its application is often flawed, then it should not come as a surprise that many mega-projects may by all means be considered failures.

NOTES:

- (1) The insights of the Amsterdam Regulation School stem from the realization that within any dominant elite (or, in Marxian terms, 'class'), there is a necessary division of interests, which strongly correlate to the business orientation of the constituent members. With respect to disposition, two ideal-type orientations are identifiable: the view of productive, fixed capital and that of circulating, highly mobile capital. The material, soil-bound side of productive capital implicates a more entrenched outlook: of necessity, industries are rather less flexible and more concerned with employment, sunk costs and protection from foreign competition. For various types of product, this confined geographical scope extends to the market area as well - the region. Circulating capital thrives with open frontiers, allowing money to find its way to the highest rate of return (interest, stocks).

Marxian economic theory presupposes productive capital to be the logical basis for any circulatory activity. This is not to preclude the two functions from being geographically dispersed, though, so that Kuwait, for example, can mobilize financial resources derived from oil sales for expanding industrial activities in Germany, in the shape of steel production. From this perspective, Kuwait is, in a sense, a free-floating state.

- (2) As Richards and Waterbury note (1990, p. 401), even the only 'entrenched indigenous class in the region', that of landowners, was in fact a creation of the state, dating from the 19th century when 'private title to land was extended to the rural notability by revenue-hungry governments'.

Chapter 3:

Regional Strategies

Aims and means of external control

- 3.1 Introduction
- 3.2 Hegemonic projects in the region
 - Hegemonic and survival strategies
 - 3.2.1 Hegemonic aspirations - region
 - states
 - Dependence within and outside the region
- 3.3 Disputes
 - Rise of the territorial conflict
 - Water disputes
- 3.4 Tactics
 - Diplomacy
 - Cooperation and trade
- 3.5 Extraregional actors
- 3.6 Conclusion

3.1 Introduction

Water resources are best managed at the basin level, that is, the entire river basin is taken to be a single unit (cf. Appendix to Ch. 1). But the political configuration is not very conducive to integrated water management. Naff & Frey (1985) may argue that user interdependence can be a starting point for political cooperation, but one could state with equal validity that the vital importance of the water resource offers ample scope for none-too-subtle political moves.

This Chapter discusses the political use of water, both as an aim and as a means of reaching other goals. First of all, I will review regional actors' aspirations, to see if water wealth plays a part there, and whether their course of action promotes or endangers regional and international stability. The employability of water in what has been termed a state's 'hegemonic strategy' will be an important theme.

3.2 Hegemonic projects in the region

The Mashreq as a region is too divided to make a worldwide impact. In addition, each Mashreq state alone lacks the power to have its own way, the way a state like Germany or Japan can, although oil supplies and the Suez Canal remain viable bargaining chips. The foreign policy goals set by most states are therefore limited to the regional level. In this section it will be discussed which strategy, as judged by state actions, governments consider most compatible with their state interest.

Hegemonic and survival strategies

As explained in the Framework Chapter, I take states to aspire two possible levels of objective. The former is confined to survival and stability, whereas the latter is an expression of further-reaching ambitions: political and/or economic dominance, or hegemony.

Dominance is to say that a state can impose its will on allies and adversaries alike (be it societal interests or other states), through coercion, pressure or display of authority. A state of **hegemony** ensures the state of a leading position because its leadership is considered legitimate without overt coercion.

Which are the factors that provide a state with regional influence?

The non-Arab states of Turkey and Israel will, just like Iran, find it hard, for ethnic reasons, to act as legitimate regional leaders. For one, the right of existence of the state of Israel itself (which is to say, its external legitimacy) is fiercely debated within the Arab world. Moreover, the Arabs have never forgotten the humiliating experience of Ottoman rule. A shared cultural identity, and a resulting aversion with regard to non-Arab neighbours serves as a legitimating, mobilizing instrument for Arab states (Hudson 1977): the *Arab cause* concerns, in a practical sense, mainly the hot and cold wars waged with Israel and the Palestinian question, but in political leaders' rhetoric, *panarabism* (the conviction that the Arab nation should actually belong to a single state) is still a recurrent element. It is interesting to note, though, that different aspects of a political-ideological, religious and economic kind may compensate for ethnic divisions, as became manifest through the appeal of socialism and Islamic Fundamentalism. A regional hegemonic hopeful does not necessarily have to be an Arab state.

An appeal to *religious* maxims (and the Islamic conception of principles of International Law stemming from them) encapsulate a broader area than just the Arab world (*dar al-islam*, *dar al-harb*). Religious appeal dramatically increased Iran's popularity with sections of the Arab population after the Shi'ite revolution and subsequent verbal anti-Western aggression.

Economic success may be influential as well, since it may elicit stabs at imitation. The model function of Turkey's own way, a successful mix of economic growth, socialist appeal, anti-colonialism and Islam, cannot be underestimated (cf. a.o. Richards/Waterbury 1990, p. 300 ff.).

Common resistance to Western dominance has repeatedly driven together Arab states and other Second or Third World states, e.g. the NIEO. Economic chasms however do not just divide parts of the globe, they crosscut the Arab nation just as well. A stress on the unequal distributive effects of oil wealth will therefore appeal to the poorer Arab states. States harbouring less far-reaching aspirations, of course, set practical goals as well. The possession of money, fertile soils, energy, and, surely, water, are factors states deem necessary assets to further their development aims. In as far as states are not able to get hold of such assets through exploitation of their own resource base, they will be compelled to find other ways and means to get there: conquest, diplomacy and trade.

Apart from the region, I consider the river basin an 'arena' where cooperative and rivalling tendencies, and therefore, hegemonic strategies, coexist. A single state dominates every river basin, that is to say, exerts fluvial dominance over its riparian neighbours.

Water acquisition strategies and political strategies may be either complementary or reflexive: political means may serve to reach water aims, whereas possession of water resources may be instrumental in extorting diplomatic settlements, conducive to reaching political goals. In a flow chart:

diplomacy	diplomacy
foreign currency - possession of water -	foreign currency
conquest	conquest

3.2.1 Hegemonic aspirations

a. the region

Prior to addressing the issue of which states are eligible for Mashreq hegemony, reviewed at the state level, it is apt to pause at the regional level, to describe a fundamental antagonism, i.e. a struggle for hegemony, of two competing economic conceptions (cf. Ch. 2). Due to the nature of their economies, productive and rentier states find themselves advocating conflicting goals, both with regard to each other and to the outside world.

Should Arab states integrate economically, in the mould of the European Community, production states could well benefit, deriving substantial economies of scale. Rentier states, on the contrary, look for investment opportunities and markets for their fossile fuels.

The economic implication of such strivings fits in nicely with the present, neoliberal paradigm so dominant in the Western world. As the productive states watch the latter states waste their easy money away, using it mainly to promote tranquility and stability both at home and in their backyard, the existence of *nouveau riche* rentier states is a source of frustration for them (cf. Luciani 1987, p. 78).

Analogous to the other geographical levels of analysis, the regional hegemon, too, has a significant say with respect to the rules or the game of interstate association. In terms of the theory of 'concepts of control', the oil boom has changed the hegemonic perspective from productive power to monetary wealth. Money (circulating capital) proved more potent than ideology.

In the process, the ascent of *rentierism* has altered the content of the pan-Arabist concept. The take-over of hegemony by conservative rentier states, at the expense of the weakened productivist state of Egypt shifted the interpretation of the 'common good' from revolutionary, social priorities to religious, moral themes, from federal integration to intergovernmental cooperation (s. Luciani 1987: 79).

b. states

Assuming that a leading state will have to command a fair human resource, natural resource and/or capital base, no more than five states would be eligible for *hegemony* in the area under review: Egypt, Saudi-Arabia, Iraq, Syria and Turkey. A state whose right of existence itself is disputed, Israel can only realize national goals through less than subtle means. That state will be highlighted, however, as a *dominant* regional actor in terms of military capacity.

In the 1952-1967 era, *EGYPT* was the undisputed leader of the Arab world, both economically and ideologically (cf. Korany 1984). His handling of the Suez crisis made Nasser's popularity skyrocket. To boot, the Aswan High Dam scheme was all set to propel Egypt into rapid economic development and prosperity for Egypt; the project would make that state, already the largest regional agricultural exporter at the time, an industrial giant as well.

Egypt's defeat in the Six Day War meant the first crack in the state's standing. The Camp David accords signed with Israel dealt the final blow: the oil states, which had meanwhile struck it rich, withheld Egypt development funds and effectively chucked the country out of Arab hegemony. Riyadh, the Saudi capital, had now become the new centre of power.

SAUDI ARABIA The oil boom made the Saudi state, OPEC's biggest oil producer by far, the pre-eminent regional actor. A poorly populated, vulnerable state, lacking almost any natural resource but fossile fuels, Saudi Arabia cannot aspire for geopolitical goals, but hopes to exact regional stability through financial (cf. Japan) and oil diplomacy.

SYRIA has had to take some severe beatings as a result of, and since, the colonial division of Greater Syria. The loss of the Golan to Israel makes Syria a fanatical frontline state, a reason for richer regimes to furnish the state with generous funds. Syria taking the hardest anti-Israel line of all must be boosting its regional standing to no end. The decline of the Soviet Union as a superpower has temporarily converted Syria to Western articles of faith, which has translated into acceptance of Syrian control of the Lebanon, as a thank-you for Syria's most cooperative attitude during the Second Gulf War (van Leeuwen 1991). Since that war, Syria seems to be going it alone once again, though.

IRAQ For some breathtaking moments, Saddam Hussain's military explorations in Iran and Kuwait, which were perhaps meant to simultaneously pacify domestic opposition and to gain control of extra oil stocks, seemed to be the the stepping stone to Iraq's regional dominance. As a productivist oil state, the Iraqi leader could call on North-South sentiments with some justification. His riling at the rich oil monarchies rallied admiration among Palestinians, Yemenis, Sudanese, Jordanians and many citizens of Maghreb states. Scud attacks on Saudi soil, but even more so on Tel Aviv, again drummed up support for Saddam among large sections of the Arab population. Eventually however, Iraq emerged weakened from both Gulf Wars.

Like Libya, Iraq is an oil state which has endeavoured to use much of its oil revenue for productive applications, notably in agriculture. These efforts have not met with resounding success, which cannot simply be attributed to the wars - bad planning also plays a part (Richards/Waterbury 1990).

TURKEY likes to see the 21st century as the 'Turkish century'. To foster that situation, Turkey appears to weigh pros and cons at several geographical levels.

At a global scale, the state pursues a (pro-American) goodwill strategy, which finds its expression in regional peace initiatives, and ready concessions to the allied forces during the Gulf War.

At the 'interregional' level, Turkey holds a balance-of-power between:

- Europe (applying for EC membership);
- the former USSR, with Transasiatic Turks as a 'silent force';
- the Arab world (Turkey is a member of an association of Islamic States), where the state alternately maintains cordial relations with Syria and Iraq. As an oil-poor state Turkey has good business partners in the strange bedfellows Saudi Arabia and Libya. Turkey is the only Middle East state to achieve agrarian and industrial success, and could serve as an economic model. Turkey's GAP scheme is meant to fortify this economic base even more (s. below).

ISRAEL Water security and military security, the motives for Israel territorial expansion and fluvial dominance of the Jordan basin, are two sides of the same coin, analogous to the principle 'attack is the best defense'. On the one hand, the hydraulic imperative in official discourse justifies territorial expansion, on the other hand, water politics in the occupied territories (hydraulic apartheid) fortifies its 'de facto exercise of sovereignty over the occupied territory' (Naff/Frey 1985, p. 69). With American help, Israel is a regional military superpower, and has managed to perpetrate a deadlock which has slowly but surely shifted in the direction of Israeli preconditions.

Table 3.1.3 (below) summarizes the aspirations and the means available to fulfil these aims. Apart from the ways and means just mentioned two other, interrelated means are contributing factors: loyalty to American power strategies and rents the relation between the two will be further discussed in Chapter Five.

Dependence within and outside the region

The other states seem to be either too small (Kuwait, Emirates), too much ripped apart by civil war (Sudan, Lebanon, Ethiopia) or otherwise too dependent (Yemen, Jordan) to have a shot at regional leadership. Out of these states, Jordan and Sudan are situated in the region's major river basins. These states, 'being in a much weaker riparian and military position (...) can bolster [their] position only through a network of linkages to other states within and outside the region, thus increasing likelihood that any ensuing conflict could overflow the region' (Naff & Frey 1985, p. 60).

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Tables 3.1.1 - 3.1.3: Regional resources, aspirations, claims.

.1 Population, water resources, income

Legend: Pop(ulation) incr(ease), Rain(fall), Gr(ound)w(ater), G(ross) N(ational) P(rod)uct/c(apita), Oil r(e)s(erves)/y(e-ar), R(e)n(e)w(able), Foss(ile).

++ very high + high / fair - low ? unclear 0

State ('85) ¹ '80-85 ³	Pop. incr	RainGrw. fl.	River Rnw	Foss.	Rnw. abl (1Mm3/y/y) ²	GNP/c \$('85) ¹	Oil rs.
Iraq	16	3,6	+	/	-	++	1,80 3020 143
Israel	4	1,8	++	/	-	/	0,37 4990 ¹
Jordan	4	3,7	-	?	-	?	0,16 1560 ¹
Lebanon	?	-	+	?	-	+	... 1450
Saudi-A.	12	4.2	/	+	-	-	0,16 1560 ³ 65
Kuwait	2	4,5					... 14480 ¹ 154
Syria	11	3,6	/	?	-	+	0,61 1570 ¹
Turkey	50	2,5	++	+	/	++	0,52 1080 ¹
Yemen	10	2,6	/	+	-	+	0.72 approx.545 ¹
Egypt	49	2,8	-	/	-	++	0.3 610 22
Sudan	22	2,7	/	/	/	+	1,19 300

source: Beaumont/McLachlan 1985, p. 56, 65, except:

¹Richards/Waterbury 1990, p. 58, ²161, ³83

⁴Stork/Wenger 1990, p. 28

Figures have been added together (or averages have been computed) for the former Yemens.

Footnote numbers apply to this Table only. For GNP, it has to be noted that the figures would look quite different, if induced rent income and external cost factors (depletion) were taken into account (cf. Stauffer's analysis in Stauffer 1987).

.2 Aspirations and loyalties

	ASPIRATIONS			MEANS OF EXERCISING POWERLOY-				
	terri- torial	fluvi- atile	oil	water	ple	mili- tary	diplo- macy	ALTY to US
Turkey	+	+	-	up	+	+	+	+
Egypt	-	+	?	down	+	+	+	+
Iraq	+	-	+	down	+			-
Saudi-A.	-	-	+	no	-	+	+	
Israel	+	+	-	down	-	+		+
Syria	+	-	-	down	+	+		?

.3 Claims to external legitimacy

S.Ar.: dominance OPEC, religious dominance (Mecca and Medina)
Syria: claim to Greater Syria, anti-Israel hardline,
Iraq: proponent of the poor 'South'
Turkey: dominance of water resources, successful production state
Israel: military dominance; biblical claim to Greater Israel

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Within the (extended) region, Jordan relies on the Gulf States, while Ethiopia has supposedly received technical aid from Israel. It is useful to recognize that almost all Arab states, including states nourishing hegemonic aspirations, have received funds from the Gulf states helping them realize economic objectives (Ch. 5).

Of even greater significance are relations with extraregional actors. As has been explained in Chapters 1 and 2, most Middle East states are too weak, for want of legitimacy, to allow for entirely autonomous operation. It is true that OPEC states could exert influence on the global stage, provided they take a united stand, but in isolation, even these states could not play a major part without outside aid.

The Cold War made it possible for regional states to play the superpowers off against each other: Egypt for example, which had veered to the West at first, turned to the Soviet Union for financial support to help pay for the Aswan High Dam, after which the state reverted to the pro-Western camp, again at great financial benefit. For revolutionary Turkey it soon proved more rewarding to follow the American lead. The Arab socialist states of Syria and Iraq kept receiving funds from Moscow with which to finance their hydraulic projects and military power. For Syria, the end of the Cold War and the demise of the USSR implied that, for the time being, its objectives were only attainable in conformity with American wishes.

pro-US: Saudi Arabia, Egypt, Israel, Turkey
formerly pro-USSR: Syria and Iraq, half of Yemen

This dependence on external (f)actors may play an important part in boundary and quota conflict over resources: soil, oil, and, predominantly, water.

3.3 Disputes

Rise of the territorial conflict

Despite all rhetoric of the united Arab nation, territorial and fluvial disputes have surfaced time and again. Boundaries among several of these states were drawn by colonial powers, sometimes with the deliberate intention of favouring a state (Israel), or, possibly, of sowing the seeds of discord (divide and rule in breaking up Greater Syria) or else of settling old diplomatic scores, be it with another colonial power, or with the former colony (cf. the status of the Province of Hatay).

Territorial demarcation is not the easiest or most obvious of assignments in this area. On the one hand, the state system is still viewed as 'alien to Arab culture' (cf. Ch. 2), on the other hand, due to an inhospitable desert ecology and the still widespread practice of tribal conglomerations to migrate between water sources and grazing meadows, boundaries have remained rather fluid over time. Only now, they have become increasingly subject to dispute.

It is a bewildering thought that a couple of square miles of infertile desert could be the stakes of territorial conflict. But such controversy cannot be separated from oil and water politics. The roles water and oil have to play in territorial conflict will become obvious in three quick stages:

1. Water and oil are scarce, and hence desirable commodities;
2. The discovery of water or oil greatly increases the economic value of the plot where it is found;
3. The economic value of these factors of production is linked up with their geopolitical value.

Water can be used as a means to force other items on the political agenda, or to lend force to their prominence. As attention turns to scarce strategic resources, disputes will quickly be elevated from being mere issues of 'low politics' to matters of 'high politics', where 'issues can go as far as denial of the state itself' (Korany, p. 72).

A different class of instances where territorial boundaries are being disputed by domestic or outside actors consists of disputes where different nations do not accept each other's right of existence (external legitimacy), or the boundaries in which they live. In the Mashreq, the Kurdish problem, in Turkey, Iran, Iraq and the former Soviet Union, and the Arab-Israeli controversy, culminating in the Palestinian problem, are the most striking instances of the latter.

Kurds The temporary closure of the Euphrates river by Turkish authorities in order to fill Lake Ataturk, can be interpreted as a warning to Syria not to serve as a sanctuary for the militant PKK. Syria, pursuing an obstructionist policy line, has controlled and aided Kurdish insurgents, notably in the Syrian-controlled Biqa'a valley in the Lebanon.

Arab-non-Arab The granting of technical aid to Ethiopia appears to be a serious effort to prevent Arabian influence from extending to the Red Sea. For, Eritrean rebels are being supported by various Arab states and have, for a long time, been allowed to use Sudan as an ersatz military base.

Palestine The Palestinian problem is the cumulation of Arab-Israeli hostilities. As a matter of fact, though, the Middle East peace talks to a large extent concern the question of who owns the water supplies percolating into aquifers underneath the West Bank (cf. Hofstede 1992). ***

Water disputes

For the sake of clarity, water resources can roughly be divided into groundwater and surface flow. Since international ground water disputes so far have been few²), there is no tradition of legal settlements in International Law. Conflict on international river flows has a much longer history. Different approaches to solutions have evolved, and they have not agreed upon a single perspective (Berger 1992).

In my Framework, I have differentiated between upstream, downstream and no- (or off-)stream states. This classification is a political one. Of course, there are surface flows which either do not cross boundaries (e.g. the Dan) or, if they do, they do not elicit much controversy among neighbouring states (e.g. the Orontes). Such streams will be referred to as 'no-trouble streams', and won't receive much attention henceforth, either.

At the regional level, surface flow is the most disputed of the two types of boundary-transcending water resources by far. *Disputes on surface flow* rage in all of the three large river basins: Jordan, Euphrates, Nile. The Shatt al-arab was the focal point of strained relations between Iran and Iraq, but since that dispute focused on issues other than the freshwater resource itself, I will not discuss that stream any further.

3.4 Tactics

Above, I have indicated *territorial conquest, diplomacy* and *trade* as instrumental means to realize regional aspirations:

- **Territorial conquest:** this being the most conspicuous method, the strategy of annexation makes for the fiercest opposition. The possession (not necessarily the use) of an impressive army may prove indispensable.
- **Trade:** generates foreign currency, most helpful for the acquisition of other means of production.
- **Diplomacy:** exacting concessions through negotiation, carrots and sticks.

To hamper such aspirations, the option of *obstruction* is viable and in use, but obstructing states may, of course, fall victim to effective obstructionist measures by affected, stronger states. Table 3.2, below, offers a more detailed survey of different tactics available, regrouped according to the positions states may assume in the hydropolitical spectrum. Several of those will be clarified below.

Table 3.2: Survey of tactics (regional strategies)

<u>upstream</u>	<u>downstream</u>	<u>no-stream</u>
pressure	appropriation	desalination
consultation	harrassment	imports
regional	casus belli	diplomacy
cooperation	goodwill	technical aid
threat	imports	mining
sales	retail	
obstruction	donations	
	obstruction	

Appropriation

The most overt tactic, appropriation by military and semi-military means, is currently pursued by Israel only. Invoking the country's size in biblical times, colonial agreements (see a.o. Skutel 1986), territorial war gains and private settlement have shifted the state's boundaries ever further into formerly Arab-inhabited lands, to the effect that water resources now fall just inside the reach of Israeli control or occupation. As Naff & Frey summarize, the state has managed to exact a more than 'favourable alteration' of its position, 'from originally being downstream on all important Jordan river tributaries except for the Dan to having a controlling upstream position on all except the Yarmuk' (Naff/Frey 1985, p. 79).

Diplomacy

As for diplomacy, I choose to classify the various diplomatic strategies under two headings: confronting (offensive, defensive) and convergent (goodwill, pacification). I take both categories, however, to be instruments of power politics.

- 1a) Cooperative initiatives and conferences are identifiable as instances of power politics, since participation with a conference makes for a certain obligation.
- 1b) Oil states use their energy and money resources for a diplomacy of pacification, taking advantage of the energy deficit felt by most other states.
- 2) A *casus belli* can only be declared by dominant/hegemonic states (Israel, Egypt). Military might lends force to objectives of water supply, as a trump card against the upstream states concerned. This is a form of obstruction, which is actually a class in itself, a silent war which is sometimes fought at the diplomatic, sometimes at the economic level. It is to this strategy that I now turn.

Obstruction

Water wealth may as yet yield unsatisfactory commercial rewards; strategic benefits however are very real. Both for upstream and downstream states, political use of water is particularly effective as a means of obstruction.

It is logical for an upstream state to make use of its 'tap' facility to exert a significant measure of control of growth and stagnation of downstream economic development. States who contest the dominance of the states have equal opportunity to obstruct. These obstructionist tactics may range from a boycott of regional cooperation projects to a threat of military attack. The very size of pipelines, irrigation and hydropower projects makes for an excellent military target.

I discern three different forms of obstruction:

- hydraulic obstruction: an upstream state builds dams, enabling it to influence the amount of downstream surface flow with a view to hurting a downstream economy;
- diplomatic obstruction: refusal to participate in cooperation projects or conferences;
- military obstruction: (threat of) destroying hydraulic installations.

Note that a threat is not necessarily meant to be enforced by action. The threat in itself is enough to convince the World Bank it must be wary of granting funds to development projects. In turn, states which manage to finance and complete their megaproject in defiance of a World Bank withdrawal (or even, in Iraq's case, of UN sanctions) find reason to pride themselves on their perseverance.

Once a state has the means to control of a river flow, it will not refrain from using that water flow as an instrument of power with regard to the weaker state. The small Table below indicates which state dominant in a river basin area, and which state is most hurt by that dominance.

<u>river</u>	<u>dominant</u>	<u>situation</u>	<u>most hurt</u>	<u>situation</u>
Euphrates	Turkey	up	Iraq	down
Jordan	Israel	down	Jordan	down..
Nile	Egypt	down	Ethiopia	up

Euphrates In order to fill the storage reservoir near the Ataturk Dam, the GAP project's showpiece, the Euphrates was closed for a month, albeit with compensating extra supplies in advance. Sceptics posit that this water could well have been supplied from Lake Karakaya, an older artificial lake, and they suspect political motives to have played a part. Not only would Turkey like to see Syrian hospitality for Kurdish rebels vanish, there are several territorial disputes dating from colonial rule. Yet, although Syria takes the lead in making a noise, Iraq is in effect hardest hit by the combined effect of Turkish megaproject GAP and Syrian withdrawals (a.o. Nasrallah 1990).

Nile It is true that Egypt systematically uses up more than its fair share, convened with Sudan in 1959; yet, its neighbours are not that hard hit, since they have not been able to reach a economic position which would call for a substantial need for extra supplies. Sudan has not yet used up its own quota, while Ethiopia does not have the means to exploit the ample resources at its disposal. Through diplomatic channels, however, Egypt appears to impede Ethiopian development intentions by condemning and threatening dam construction plans. Since upstream claims will make themselves felt sooner or later, as Egypt watches its supplies shrink, the allocation of rights to Nile waters will be a serious issue in the near future.

Jordan The Jordan has been subject to much acrimony. Israeli damming of Lake Kinneret has inflicted hardship on the state of Jordan, reducing the flow of the river Jordan to a small, briney trickle. The per capita quantity available for Jordan ranks lowest in the region. In the sixties, Syria and Jordan, for their part, devised a scheme with the sole purpose of diverting much of Israeli supplies, a scheme which was thwarted by Israel's conquests in the Six Day War. Until this day, finally, Israel's hold on the Jordan seriously affects Jordanian water supply, leaving the vital East Ghor canal to siltation.

Cooperation and trade

To offset the miserable record emerging from the above paragraphs, it must be conceded there have been plenty of initiatives for intraregional cooperation and trade. Table 3.3 summarizes the various initiatives for economic and political cooperation and covenants which have been proposed or arrived at in recent years. Several of those will be discussed below. The majority by far, however, came to nothing or ground to a halt halfway house, which may in many cases be attributed to obvious self-interested intentions.

* Table 3.3 : Initiatives for cooperation and talks

	states involved	flow	major flaw
<i>talks</i>			
Ankara conference	22, int. aid inst.	all	peace talks in Madrid
Cairo conference	40 African states	Nile	colonial claims
<i>talks</i>	Israel, Jordan	Yarmuk (Jordan tributary) ?	
repeated talks cooperation (UNDUGU)	Turkey, Syria, Iraq Nile riparians	Euphrates Nile	GAP boycott Ethi- pia
<i>restorage</i>			
in Lake Tana	Egypt, Ethiopia	Nile	sovereignty
in Lake Kinneret	Israel, Syria, Jordan	Jordan	id. salinity
<i>project aid</i>			
Jonglei canal	Egypt, Sudan	Nile	civil war
technical assist- ance	Israel, Ethiopia	Nile	Ethiopian finance
<i>water trade</i>			
pipeline	Iraq, Jordan	Euphrates	sovereignty cost
<i>pipeline</i>	Sudan, Saudi Arabia	Nile	id.
Peace Pipeline	Turkey, all Mashreq	Euphrates	id.
overseas trans- port	Turkey, Israel	Euphrates	cost
Wachtel plan	Turkey, Syria, Israel	Euphrates	see Epilogue

Talks

When GAP will be completed, annual Euphrates flow to Syrian territory may diminish by 40 per cent, flow to Iraq might decrease from 30 to 11 bn. sq. km. annually (Schoenmaeckers 1990).

This will no doubt aggravate crop failure and interruption of hydropower supplies there. GAP however, is undebatable for Turkey, which goes some way to explaining the failure of repeated talks between the three states, notwithstanding jubilant press statements (Jansen 1990, Murray Brown 1991).

Syria, Israel and Jordan comply *de facto* to the Johnston plan of 1955, but for this modification that Israel overdrafts its supply by 100%, Syria by 300%, so that Jordan stands to lose most. Under American auspices, Israel and Jordan reluctantly started talks in 1986 to arrive at an agreement on the Maqarin dam, construction of which could benefit both states.

Egypt, finally, has tried to win the other Nile riparian states over to cooperation projects, which are partly aimed at objectives of foreign currency (joint electricity generation) but which essentially should guarantee the state a larger influx of water. There is a partitioning agreement dating from 1959, but that settlement only involves Egypt and Sudan. Egypt refutes all damming efforts by upstream states on the basis of historic, colonial rights.

Restorage

It has been repeatedly suggested that the large regional lakes be used as temporary reservoir for storing run-off water, to be distributed among adjacent states. Israeli scientists time and again like to present diversion of surface flow to the Lake Kinneret (Galilea Sea) as the ideal solution for a commonly shared water shortage. The most obvious problem is that of overall salinity within the lake, which would badly affect the quality of any water tapped from the reservoir.

Lake Nasser, the reservoir servicing the Aswan High Dam, experiences high loss from evaporation due to intense solar radiation. Proposals have been aired to store much of its content in Lake Tana, where the heat is less intense. Practical and political problems have prevented a serious appraisal of this alternative up to now.

Sales

Water sales have a considerable history in the region: between the World Wars, Egypt supplied water to Saudi Arabia, Iraq to Kuwait. More recent intraregional canalization plans ran aground on considerations of sovereignty and regional instability (cf. Falkenmark 1989). Political afterthoughts prevented plans to divert Nile water into Israeli territory from becoming reality as well. From a technical point of view the problem would seem to have been manageable, since the utmost reach of the Nile distribution system is only 40 km away from the Israeli border, but discord on the status of Jerusalem caused the plan's breakdown.

The Turkish 'Peace Pipeline' project, commercial water delivery would seem to be politically inspired as well¹). The pipeline would have two branches, one of them carrying water to Saudi Arabia and Kuwait, the other to Israel and Jordan. The latter branch's political sensitivity is, of course, huge, in the context of the Israel-Arab conflict. Costs of construction are taken by some to be prohibitively steep, but vulnerability to political abuse is more often cited as an hidden argument, both with a view to potential obstructionist action by the seller, and the possibility of terrorist attack by third parties. Besides, technicians doubt whether Turkey can really support such a huge outflow of water, and still uphold its pledge to supply Syria with 500 mcm/s while being unable to solve its continual domestic problem of water supply to its cities (Lemoigne 1992).

The Israeli Wachtel plan, finally, would divert water through a joint pipeline from Lake Ataturk (part of the GAP project) to the Golan Heights, after which a surface canal system would channel the water into Israel and Syria. The canal would serve as a military anti-tank barrier. Should Syria decide to obstruct the pipeline running under its territory, it would also hurt the Palestinians and Jordanians (Donkers 1992).

As an alternative to its pipeline, Turkey offers Israel overseas water transportation, to be carried in giant synthetic bags. At the same time, though, Turkish authorities are reticent, since they have to count with substantial opposition to overly cordial relations with the state of Israel, both from the part of its Arab neighbours and its own (often Fundamentalist) denizens (Pope 1990).

3.5 Extraregional actors

UN's role

None of the aforementioned river basins is subject to a generally accepted agreement on partitioning water supplies. Whatever agreement is in force, it will only be valid according to convenience. There is no such thing as a coordinating regional and international institution determining and codifying binding rules.

International mediation of a water-related dispute is as yet a rare article. The only UN investigation carried out, relating to Israel's conduct in the Litani affair (cf. *Monday Morning* 1982) did not yield conclusive evidence³). Achievements of International Law sometimes provide some sense of direction (but do not as yet pertain to ground water disputes). but cannot exert authority when affected states are wary of bringing their cases before the International Court of Justice. There are, apparently, compelling reasons to refrain from such action.

As a result, there is nobody to withhold a dominant state. Lack of coercive power exerted by legal institutions, together with an enduring UN power vacuum, allow the stronger state, invoking 'national interests', considerable room for manoeuvre, without encountering any sort of counterpressure. Only where extraregional interests are at stake (cf. the invasion of Kuwait) a situation arises where international community sees fit to pull the brakes.

US and EC

The shady area between mutual agreement and United Nations intervention leaves considerable room for Great Powers, seeking to secure or maintain stability in the region, to enter the stage.

The backing of the United States of America, especially since the Cold War ended, is indeed an important prerequisite for a regional state actor to promote, or indeed frustrate, a state's hegemonic authority in a river basin area. First, since the execution of the existing agreements is 'fragmented, fraught with controversy and misinterpretation', and UN authority is lacking, the intervention of an external power is called for before any knot can be cut (Naff/Frey 1985, p. 69). The chaos which would otherwise reign provides the legitimacy of American intervention. The Americans however play a double act: they do not just mediate, they are the patrons of the water-rich states. Turkey, Israel and Egypt are supplied with billions of dollars annually, and are much interested to secure extraregional actors' goodwill. It is this monetary support which enables Egypt and Turkey to pursue a two-pronged strategy:

- international goodwill: on the one hand, they organize prestigious conferences for promoting peace and regional cooperation;
- regional pressure: on the other hand, they use their military and water-power dominance to put troublemakers back in line.

In sum, now that the Soviet Union has fallen away as a donor, the US remains the sole *capo da capi* to the Middle East. 'There will not be a water war unless the United States decides this', stresses Professor Allan of SOAS (Pearce, 8/91).

Given this prominent American role, there is a strange 'blind spot' in US foreign policy. although it is frequently noted that the Middle East could very well be about water, not oil, the US does not seem much interested in water politics itself. The US State Department simply does not reckon water politics a 'trendy' enough issue. Joyce Starr (CSIS), who noted this, states this to be a golden opportunity for the European Community to fill the gap. Europe, however, has assumed a conspicuously lacklustre role in the account so far. The Community members, so often divided on foreign policy, seem to be preferring the sidelines, although there are some initiatives (cf. Islam 1991).

3.6 Conclusion

Large agricultural states have endeavoured to stimulate the economy, attain self-sufficiency or a favourable export position with the help of water projects. Oil-rich states, which tend to be water-poor, avoid dependence on water-rich states at high cost, through projects which quickly deplete water stocks. With a view to riparian neighbours, states have effective obstructivist strategies at their disposal to frustrate them directly (closure of a barrage) or indirectly (impede World Bank loans by declaring a *casus belli*).

Since egotism continues to ride high, no matter Arab solidarity bonds, partitioning of water and distribution of development opportunities remain suboptimal. Political use of water at the regional level, then, goes at the expense of other parties who might well need it more.

Some form of regional cooperation, exacted by a regional water commission, as has been advocated by CSIS, the influential American center for international policy, might put an end to this situation, but is for the time being illusory while it is unavoidable that strategic water use is linked to different political disputes.

Notes:

- (1) In judging such proposals, it is useful to be aware that discussion of any of these proposals is often fraught with politically inspired bias. For instance, it may be wondered how Joyce Starr, who herself has served a pro-Israel lobbying organization, can impartially embrace a politically 'naive' proposal such as the Peace Pipeline. The same point can be made about Arab scientists Farid and Sirriyeh's scathing criticism of any water project involving Israel (Farid/Sirriyeh 1985).
- (2) Ewan Anderson has reported a case of serious transboundary overpumping by one of the Emirates, causing the water table of Northwestern Oman to drop more than 50 metres. Since there is no mention of any diplomatic repercussions, it would seem that the case, has apparently been settled amicably (E. Anderson 1980).

In time, a ground water dispute is conceivable between Egypt and Libya, where a Great Man-made River taps the giant Nubian aquifer, potentially depriving Egyptians of much-needed resources. Since Egypt has not displayed any serious interest in exploiting these supplies, Egyptian protest does not have a convincing ring. If it had, though, chances of transboundary tapping of any significance are unlikely, with a view to geo-hydrological barriers (Personal communication ir. A. Tuinhof).

- (3) The outcome's validity has been disputed, since the research team would seem to be inadequately equipped to pass a final judgment. With a greater degree of certainty it can be said that Isarel has gotten hold of (some would say, snatched) essential geoghydrological data on the Litani (see es-Said 1982 and others).

Chapter 4:

Internal Strategies of Control

- 4.1 Introduction
- 4.2 State and Development
 - State as redistributor
 - Shifting priorities
 - Strategies of control of the agricultural sector
 - Two-nation project
- 4.3 Effects of different policy lines
 - investment
 - prices and subsidies
 - land-use policies
 - water allocation
 - Conclusion
- 4.4 Integration of centrifugal forces
 - Factors explaining failure in development
- 4.5 Conclusion: inequality and modernization

4.1 Introduction

In Chapters One and Two, it has been argued that in the region at issue, the state is the axis around which the economy revolves. Centralization and modernization emerged as key concepts which the state aspires to foster, supported by domestic and external actors. The exploitation and allocation of water resources is instrumental to such objectives.

In the present century, as a consequence of great economic and political upheaval, the prominence of the agricultural sector has shifted. This section describes this change, and the role of the state therein. The same questions of strategy, aims and means that dominated Chapter Three are investigated, but substituting the level of single states for the regional level.

4.2 State and Development

In the Framework Chapter, I posited the avoidance of inequity, poverty and ecological degradation to be necessary prerequisites for achieving 'sustainable growth'. Criteria for development could therefore be:

- rise of per capita purchasing power
- lessening of social inequality
- lessening of economic degradation

Out of these three, Khuri (1981) addresses the former two: **growth** (incl. capacity, efficiency) and **distribution** (who gets how much of what, and why). In the section below, the latter element prevails, because of the connection with strategies employed to integrate and control sections of the population.

State as redistributor

Through land and subsidy policies, the state distributes and redistributes national income. The key social groups the state has to deal with are:

- the city dwellers
- the industrial sector
- the rich farmers
- the small farmers
- the nomadic tribes and ethnic minorities

The strategy employed with regard to any of these groups may be:

- investment in development projects and employment
- neglect
- subvention
- extraction
- integration
- repression

With a view to available means, the authorities differentiate among sectors, that is, establish priorities on the basis of considerations of manageability and taxability (see Ch. 5):

- * A majority of the city population are poor, but politically vocal. The most remunerative mode of taxation would be to scale down subvention payments;
- * The industrial sector is, as yet, small, and is well controllable and taxable;
- * Rich farmers are politically too powerful to be exacted taxation (land tax). Apart from that, they constitute a potential basis for export earnings;
- * The rural poor are dispersed, and therefore harder to control. This is even more valid for nomadic and semi-nomadic communities.

Shifting priorities

The oil boom: redistribute and rule

In the last decades, the state has steadily shifted priorities with respect to economic sectors over time.

An historic introduction, in which I return to the Framework's subject matter, is apposite. In the oil boom's first phase, redistribution to productive sectors was not a priority; services for city dwellers were given ample priority instead. Construction and subvention did not just benefit the poor; richer city dwellers were allowed to benefit as well.

Weinbaum attributes the city's prominence to the urban descent of the governing elite, serving as a solidarity factor (Weinbaum 1982). This created a pattern of unequal development among sectors, making for a rapid expansion of services and construction, and the rural population migrated to urban areas, where jobs were created in the services sector.

Sudden price fluctuations made oil states realize that energy exports were actually quite unreliable sources of income. The need for diversification into more productive sources of income required investment, which first centered around the petrochemical sector and heavy industry. Industrial development had to supply the state with a productive base to diminish dependence on extractive, external rents. The expected value added would be higher and more dependable than agriculture could offer. The industrial sector concentrated on heavy industry and durables, which were not within the reach of the domestic market. The sector itself has remained relatively small: the percentage of labour force employed in industry is about 15% in Arab states (Ait Amara 1987, p. 155)

Reorientation on the role of agriculture

Notably in the large agricultural states of the Middle East in the agrarian sector has been the 'cash cow', from which surplus could be exacted with which to finance industrial and urban expenditure (subsidies). This form of state intervention requires some form of control and supervision, but leaves rural structure and social relations essentially intact. The ease with which revenue could be reaped as a result of the oil price revolution obviated the need for productive sources of state income, such that the agricultural sector was seriously neglected. Between the mid-60s and mid-70s, agrarian states' agricultural exports fell from 30-50 per cent to about 5 % (Ait Amara 1987, p. 139).

In addition, international trade perspectives have worsened because of the loss of important market outlets, ever since Greece and Spain acceded to the European Community. That rural living standards rose at all must be attributed to the spoils of the rentier system itself, since many rural dwellers were incited to offer their labour power in oil-rich stocks, sending their surplus revenue home to their families.

By the time the First Gulf War broke out, three simultaneous developments were at work, conducive to a resurgence of capitalism in the countryside (cf. Richards/Waterbury 1990, p. 405/-6). Oil states realized that their food imports were vulnerable. Autarky had to be the new (first-level) goal; the agricultural sector ought to be cherished, not phased out. Meanwhile, the urban political and business elite (the 'new middle class') had rediscovered the rural sector as a means of hedging against soaring inflation. Third, states such as Turkey, Sudan and Egypt were heading for a major debt crisis. Syria and the Maghreb returned to a 'strategy of accumulation' based on skimming surplus for the benefit of other sectors, while Egypt pursued a liberal strategy, directed at world market integration. Generation of foreign currency through agricultural exports (second-level goals) became the 'in' thing again.

As agriculture came to serve as a 'cash cow' once more, investment in the agricultural sector accordingly increased in the eighties, now putting heavy stress on irrigated farming, as prices, as farmers' incentives, started to rise (Ait Amara 1987, p. 145/6).

Here, a marked dichotomy of oil states and production-oriented states is evident. Sparsely populated oil states have impressively raised productivity, albeit at heavy cost and expensive imports of state-of-the-art technologies.

Densely populated states, on the other hand, have not been able to significantly slow down the decline of per capita production - it was rather a question of limiting the damage as best as one could (Ait Amara 1987, p. 143, 153). No Mashreq country, then, has been able to fulfil its 'breadbasket' potential (cf. Oesterdiekhoff & Wohlmuth 1983, Part i), although Turkey's GAP project must be considered a serious stab.

Yet, it, too, must consider the problem of 'what price subvention'. Oil rents and their spin-off revenue enabled oil states to support both farmers and city dwellers (high production reward, combined with low, state-supported food prices). This strategy can, for all practical purposes, only be pursued by super-wealthy states, Saudi Arabia being most prominent among them.

The three stages of agricultural strategy are therefore;

* surplus-skimming - self-sufficiency - foreign currency generation.

The following paragraphs will take a closer look at the strategies for control states may have had in mind.

Strategies for control of the agricultural sector

Over the past decades, the way in which states approach agricultural sectors has palpably changed from a repressive or indifferent position to a more active strategy toward the agricultural sector. Turkey has been earliest and most radical in pursuing such a strategy, being alone in introducing a more 'Keynesian' encouragement policy, which has been serving the economy as a whole: Turkey is currently the largest regional agro-exporter by far.

The two approaches may be summarized as follows:

extractive: state appropriation of surplus - promoting inequality, and delevelling: monopolist marketing boards offer farmers low prices, which functions as taxation by another name;

'Keynesian': income support, demand creation - counters inequality, fosters income levelling.

An agrarian export strategy implies intensification and specialization of production, and hence more capital-intensive methods of production. Increased dependence on inputs and outside sources of rents effectuates integration of economic sectors: spin-off effects with regard to other sectors. Since the rewards of production of staple foods for the world market leave much to be desired, exports are mainly directed to the large-scale cultivation of more remunerative crops: cotton, vegetables, citrus fruits. Basic foodstuffs (cereals) and means of production (fertilizer) must be imported from abroad (Ch. 5). Both traders and money dealers stand to gain from this development. We will see that the position of small farmers, on the contrary, deteriorates: they are at the low end of consequent incomes disparity.

Weinbaum indicates three projects for development and control of the agricultural sector, which all impact differently on income distribution within that sector.

I distributive: allocation of *financial* (subvention) and *technical* means. Stated goals are agricultural modernization and growth. This approach has as an effect that the income level rises and, as a concomitant political reward, the sector will feel indebted to the generous state. An additional benefit of the increased levelling of urban and rural incomes will be a slowdown of urbanization (Weinbaum 1982, p. 38).

II reformative: redistribution of *rights* and *obligations* with regard to land, water, but also, for example, with respect to taxation. Realizing ideals of socio-economic equity are a stated motive, but, again, the creation of a loyal clientele is a desired outcome, as well as a greater measure of acceptance of modernization efforts.

III institutional: fundamental structural interference with established relationships of capital, labour and land. Rationale is the improvement of the plight of the poor and raising of productivity, while changing relations of authority and participation are additional outcomes.

Although different states have taken different roads, a common pattern is discernible. 'Bimodalism', or the coexistence of latifundia and smallholdings, is an inheritance of history, fortified by colonial experience. For reasons of ideology (social equity) or strategy (control), the state, then, may either opt for a distribution of property characterized by a small number of wealthy *Junkers* and a mass of landless workers, or for a *kulak* (peasant)-dominated countryside (cf. Richards/Waterbury 1990, Ch. 6). For the state, the first option is easiest, since the large proprietors serve as intermediary between state and countryside - government by proxy.

To dismantle structures of large landownership however the state needs to utilize its own resources to maintain some degree of control. True, the 'revolutionary republics' have all endeavoured to reform distribution of property for the sake of legitimacy. Due to budgetary considerations, though, they proceeded to disengage their relations with the peasant strata through privatization and liberalization of the economies over time. In Egypt, small farmers were effectively excluded from the credit system, while legislation on landholding was adjusted in favour of property-holders (Ait Amara 1987, p. 151/2).

'Two nation project'

It is inevitable for the state to influence relations between social groups (state as classmaker, cf. Richards/Waterbury 1990). A state which views agricultural sector as a useful tool for supplying foreign currency will choose the most promising sub-sector within the sector, or to create one, by means of an irrigation project. The degree of control and bureaucratization will, then, be high in one locality, whereas other groups, who formerly enjoyed a mutually beneficial clientelist relation to the state, will henceforth have to help themselves.

The upshot of favouring a modern and large-scale subsector at the expense of another, traditional, small-scale one, therefore, is a rift between the favoured, commercially oriented sector integrating into the economy, and a neglected group of farmers the state no longer needs (cf. Weinabum 1982, p. 31). Compared to Great Britain, for which state Hall and Jacques (1983) introduced the concept, this 'two-nation project' is likely to have a farther time horizon than the Thatcherite variety they analyzed.

4.1.3 Effects of different policy lines

The 'agricultural policy' at issue actually contains different dimensions: land and water allocation, prices and subsidies. In each of these areas, there are tendencies which promote delevelling of incomes. The paragraphs below examine whether the road to modernization as chosen by Mashreq states, intendedly or unintendedly, tends to favour social inequality, which I have indicated as one of the main problem factors. The aspect of inequality can, indeed, be considered one of the key factors that impede the very success of such modernization projects.

investment

The state clearly defines priorities within the agricultural sector. It can allocate *funds, land and water* resources with a view to promoting the development pattern of its preference. A guaranteed water supply will increase the agricultural potential. When a state embarks on an irrigation project, it will have to allocate the majority of its development funds to that project, if only because of its capital-intensive nature, and therefore, will favour richer farmers. As a result, development budgets for projects in rain-fed areas will have to be cut.

prices and subsidies

Input-supporting strategies enable government to influence the farmer's choice of type of crop, in line with goals of national development. In theory, fixed prices protect farmers who lack hoarding facilities against market price fluctuations. In effect, however, the state will opt for depressed prices due to objectives of cost reduction and extraction.

In order to modernize the agrarian sector, the state hopes to introduce productivity-boosting materials, such as HYV, fertilizer and tractors through subsidies and transfers in kind. Benefits accruing to farmers, in terms of access and yield, are widely varying. Technical improvement widens the chasm between rich and poor, since they are more capital-intensive. Two examples will clarify this point:

- a- Farmers who can raise the capital to drill deep wells deprive their less well-to-do colleagues of shallower water.
- b- For utilization of tractors and fertilizers to be optimal, a plot must have a certain size, while the farmer must ensure a guaranteed supply of fertilizer and water, if he is to benefit from the higher yield of HYVs at all.

This requirement runs counter to the widely perceptible tendency of fragmentation in the region's countryside. When a state supplies subsidies and production factors, the size of productive plots is therefore generally too small to derive any substantial benefit from production-boosting inputs. Such fragmentation is due both to military-strategic considerations (Israel), land reform (revolutionary republics) and Islamic inheritance law, which entitles all heirs to a share of the deceased's land. The former two of these factors are a direct consequence of state intervention (s. below).

land-use policies

Direct or indirect state intervention in property relations exerts influence on factors such as size, locations and the yield/price of plots, and thus both the social inequality and water utilization.

Military-strategic settlements: in Israel, a fine-grained maze of agricultural colonists acts as a civil defensive wall. These farmers' settlements necessarily consist of small plots, as far away into the desert as possible. This course of action has as an effect on water supply that an expensive water system has to be maintained, while the small size of plots require intensive irrigation in order to make cultivation rewarding.

Land reform was perpetrated in Egypt and Iraq after their respective revolutions. The rationale behind this structural intervention in property relations was of an ideological nature: Arab socialism. Weinbaum alleges, though, that there was a hidden agenda. Unstated aims were to erode the power base of the former regime, and the creation of a state-dependant clientele. As an expression of their gratitude, profiting farmers were obliged to pay the state a certain reward, and often forcibly had to accede to cooperatives (Weinbaum 1982, p. 117).

Land reclamation projects can be interpreted as land reform under a different heading. Through reclamation, with the aid of water projects, the state can circumvent entrenched interests, and simultaneously time keep extensive control of allocation of title to, and use and management of the soils. With regard to GAP, Murray Brown observes that '(l)and reform offers a panacea for poor farmers caught in a trap of debt in a region where feudal allegiances still predominate' (Murray Brown 1992). However, a Master Plan for the area indicates that such relief is inherently short-lived as mechanization is bound to spread the area, driving up input costs. forcing smallholders to migrate to the cities in the process ('The landless need help', *Financial Times*, 24-2-1992).

An interesting occasion of government intervention is provided by Kuwait, where land became subject to *rent recycling*. The state of Kuwait played an important part in the speculative boom, where generally non-productive lands were the stakes of speculation (Beblawi/Luciani 1987, Ch. 2). As a matter of fact, the land speculation led to a spectacular crash, as extensively discussed in Beblawi 1984.

The effects of land policies have seldom proved salutary for everyone involved.

| BOX 4.1 | Some effects of land-use policies

Though the military effectivity of Israeli settlement policy has proved highly successful, international resentment has ined steadily. This is exemplified by Israel's enduring conflict with the United States over a renewed billion dollar loan schedule, where Jewish settlements were the object of dispute.

Land reform in Egypt and Iraq only effected marginally altered property relations (cf. Beaumont/McLachlan 1985, Richards/Waterbury 1990). Small farmers benefited only partly, while effects on the landless were at times disastrous. Moreover, a new stratum of farmers emerged, powerful enough to prevent their lands from being taxed. 'The retreat from many plans for greater socialisation of production in countries like Egypt (...) were closely connected to the fact that it is easier to impose taxes on a private sector than on a 'socialist' one' (Luciani/Beblawi 1987, p. 6). ***

water allocation

Although (uptown!) city dwellers and industrials can pay more for their water supplies, and industry can generate higher productivity per litre of water than can agriculture, agriculture still commands 70-90% of water consumption.

Since water is such a scarce and strategically important resource, the state monopolizes water supplies as best as it can. Yet, state authority over water resources diverge among countries (Beaumont/MacLachlan 1985). Control of a central site, such as river dams, facilitates state monitoring of water allocation. Egypt, which depends for its water supplies on the Nile, effectively manages the agrarian sector, so to speak, from Aswan.

Israel, too, has a patent instrument of control in its National Water (Distribution) Carrier. As a consequence of its Water Law of 1959, all water sources accrue to the state (Laster in Shuval 1980, p. 270). Here, '(a)n all-inclusive water law provides for state ownership of all water sources and for centralized planning of its distribution and control' (Beaumont/McLachlan 1985).

In other states, water users derive their rights to water from traditional Coranic stipulations, on a time or volume basis (Beaumont/Blake/Wagstaff 1988, p. 155). Land reclamation projects, on the other hand, confer authority of land and water distribution on the state. The supply of water to these new lands, necessary for the intensive type of agriculture preferred by the state, may well go at the expense of supplies to farmers further downstream. For example, immoderate abstraction for artificial lakes in Iraq frequently reduces surface flow downstream to a trickle.

conclusion

The above paragraphs have shown shifted agricultural priorities to have added to social disparity on two accounts:

- *Disparity of land tenure*: Fragmentation impedes higher productivity per plot. Out of sheer necessity, small farmers do not proceed to a more rewarding monoculture: since they cannot afford crop failure, they have to stick to risk-reducing methods of intercropping.
- *Disparity of income*: the poorest farmers are so poor and indebted that they are not able to adopt more progressive, and hence more expensive and risky methods of cultivation (Weinbaum 1982, p. 48). These peasants already produce at the highest level of productivity they can attain (p. 60).

Since the state sets new economic priorities regarding different sectors, with a view to modernization, political *in-* and *outgroups* come into existence: groups which still belong to the clientele, and groups which have apparently fallen from grace with the state.

Nonetheless, the state has yet another priority, which is state or nation formation (Table 4.1). Those groups which rank at the lowest on the list of economic priorities may pose a political threat to stability: warring tribes, underprivileged city dwellers. The state would find it ill-advised to lose sight of such social groups. In the following section, it will be described what strategies are used to control or monitor those social groups which appear to have the potential for destabilization. The examination of these strategies will yield elements which should contribute to an understanding as to why projects so often fail to live up to expectations.

* Table 4.1: Water as an instrument of state and nation building (examples)

Turkey:	integration of Kurdish minority
Egypt:	centralization of irrigation, completed by building of Aswan High dam
Israel:	integration of immigrant groups through 'farming and settlement' (Galnoor 1980, p. 293)
Saudi-Arabia:	integration of nomads

4.4 Integration of centrifugal forces

Above, I have depicted how the state differentiates among societal groups in its strivings for development and modernization. It tries to mobilize some social groups or even to create them, in order to effectuate such plans, others it will pacify or just keep an eye on, while still others are left their own devices.

I term state strategy towards social groups;

- *integrated*, when the state tries to encapsulate a problem group or region in society through modernization, which must create employment opportunities;
- *repressive*, if the group concerned is being repressed or pursued;
- *technocratic*, where groups are simply resettled or evicted of the sake of higher national interest. Depending on the type of compensation offered (or withheld), this strategy has repressive or integrating traits.

a. Small farmers and city dwellers

The sheer mass of people concentrated in the cities makes them a potentially destabilizing factor. The urban masses are more 'politicized' than are rural interests. "As the cities expand in an era of rising expectations, so are they likely to become centres of disaffection' (Malone 1980, p. 37).

For the sake of stability, which I have accorded great importance in my Framework as a 'first level' goal, the state puts great sums of money into city development. Interestingly, one of the first interventions from the part of the Saudi government after the discovery of oil was the free supply of imported freshwater, straight from Egypt, to the inhabitants of Jeddah (ibid.).

All over the region, cities grow at a fast pace, as poverty-stricken suburbs explode. The task of supplying clean water and disposing sewage admittedly proves ever more difficult in mushrooming poor quarters, which is why disease spreads much faster there. Yet, inadequate standards of maintenance does not help the situation.

A second strategy to keep the city dwellers in control is employment. As has been pointed out, the labour market in the cities is overcrowded due to brisk urbanization. In order to tie those groups who are at a peril of dropping out of the economy, avoid any unrest and gain loyalty the state supplies jobs, unproductive ones if need be.

Finally, each state tries to keep food shortages at bay by way of imports. Since any reduction of this type of state support is bound to meet with outbursts of popular anger, food security at low cost remains an inviolable right. This point will be elaborated in Ch. 5.

Another sector which the state may find hard to control is autarkic, and hence autonomous, subsistence agriculture. Their Turkish state has been the first to bind small farmers through subvention. The increased purchasing power enables the now ex-subsistence farmers to gain loans with which to purchase productivity-boosting capital goods (fertilizer, tractors). Soon, these farmers are heavily indebted, and thus irrevocably integrated in the economy (Richards 1986, *passim*). But the irreversibility of the relation is mutual. Acquired rights to subventions and employment can only be rescinded at the expense of poverty and disenchantment.

b. Nomads and minorities

As for ethnic minorities, I make the following distinction:

- * *integrated minorities*, where ethnic or religious descent has lost its importance;
- * *migrants*, who are expatriate workers;
- * *unrecognized peoples*, the members of which struggle for liberation.

The first group logically remains outside the scope of this thesis. With respect to the second, there is usually a segregationist policy: expat workers live in specially created migrant quarters, excluded from civil life. This group will be discussed later, with relation to the economic effect on financial transfers to their families back home (Ch. 5).

Minorities which demand statehood are considered a threat to their hosts' legitimacy. They are, therefore, involuntary objects of water policy. Their lack of integration, for whatever reason, brands them as an economically backward group. Their situation is therefore similar to other groups having a 'backward' mode of production (semi-)nomadic ranchers and small cultivators.

Huge chunks of the Southern part of the Middle East are deemed unsuitable for agricultural production. Nomadic cattle-farmers of course serve an important economic function by putting the low vegetation to use. For the state, though, nomads constitute an uncertain factor. The state therefore promotes monitoring and control (level I) or permanent settlement (II) of semi-nomadic villages and ethnic minorities. This settlement may take repressive or integrative forms. Subsidies and land allocation contribute to dependency of those social groups on the state, promoting realization of aims of control and integration. Forced migration is that strategy's repressive counterpart.

One last alternative of approaching minorities is to get rid of them (option 'zero') which may range from leaving alone to look after themselves, to excluding them from public services to chasing them. This is what I would call a 'cold-shoulder' or 'technocratic' strategy.

The choice for one of the three procedures just mentioned is in part dependent on historic relations between the state and the group concerned. In a state like Saudi Arabia, the ruling elite has historic family ties to nomadic tribes (cf. Salame 1987). Such ties no doubt influence the royal house's perspective of how to approach the nomads.

BOX 4.2 | integrative strategies: examples

1. Integrative

dependence The Saudi state only came to be in the 1920s. Aiming to get a tighter grip on the many migratory tribes, King Abd-el-Aziz, with the help of an oil firm, CASOC (ARAMCO's predecessor), had the good sense to make water available to them, as Malone explains: 'Water was security, that is to say the means of transforming the wandering, raiding bedouin into agriculturalists' (Malone 1980, p. 36). Apart from water, the Saudi state also supplies the tribes with cattle fodder.

economic integration It is far from coincidental that The Turkish East Anatolia Project (GAP) is under construction in a predominantly Kurdish area: The economic momentum expected to be powered by dam projects may foster ethnic integration. On average, an inhabitant of the Anatolian city of Hakkari now earns the equivalent of only \$105 annually, whereas an Istanbulian can expect \$1180 (Waterbury 1992). The anticipated economic boom would not only raise living standards, but attract Turks from other provinces as well, stemming urbanization there, while it is hoped that mountain Kurds, too, will substitute urban life and jobs for their present remote and deprived existence. This would cause Kurdish hard-line guerilla movement PKK to lose its protective shield.

2. Cold-shoulder

resettlement Dam projects do not just meet with understandable hostility because of cultural invasion of local communities - to many, the threat of eviction from their traditional homes and plots is very real. For the benefit of the GAP scheme, 250 villages and hamlets will have to disappear, and vast acreages be flooded. If they are lucky, those farmers are offered new lands, but the availability of these grounds often runs into delay. Meanwhile, the resettled population is entirely dependent on state handouts of food and funds, i.e. direct patronage. But if they are unlucky, they are eventually settled in areas which are either overcrowded already (since the soils and water supplies are good) or marginal grounds, where soils and water supplies are poor - the very reason for their sparse population.

ignorance Yet, resettled communities are still better off as compared with the underprivileged nomadic tribes. As a rule, those communities which are to suffer most are left in the dark about what to expect (cf. Payer 1982, p. 279). Thus, when huge tracts were inundated to create Lake Nasser, the sedentary Nubians could well consider themselves fortunate (in hindsight) to be resettled at all, since the bedouin weren't even given notice that their grazing areas were going to be flooded. In Southern Sudan, large mechanized production schemes were planned right across traditional nomadic migration routes. The ensuing conflict of 'cowboys and farmers' resulted in the nomads being relegated to dwindling, marginal lands, giving rise to overgrazing and erosion (Beaumont/McLachlan 1985, p. 67).

3. Repressive

withholding utility services The Israeli government refuses to supply a number of Arab, semi-nomadic communities within its territory with state services. Only when they settle in or near 'recognized villages', they are eligible for supplies of electricity and water (s. Water Tribunal 1992).

groundwater quota The Palestinians of the West Bank are experiencing economic obstruction, since they are being denied to tap new water resources. These measures are being justified with a view to the area's precarious water situation, yet the Jewish settlers do not encounter such limits. These and other measures limited in pumping permits. These and other measures are explicitly directed at hampering Palestinian agriculture, as exemplified by an explicit, earlier statement of Israel's present Prime Minister, Rabin.

man-made river Despite UN sanction, Iraq is near completion of its man-made 'third river', interconnecting Baghdad and Basra, allegedly extending agriculture, while simultaneously gaining access to the Arabs of the swamps, who are predominantly Shi'ites. These swamps were recently bombed, allegedly to uncover the hiding places of Iraqi defectors and infiltrating Iranians. The river project is feared to topple the hydrological balance. ***

Factors explaining failure in development projects

It has surfaced from above examples that, even apart from mistaken estimates of required capacity, promising projects are likely to be failures, which is attributable to neglect of social relations. For this reason, the state must brace itself for opposition, not just from the part of those groups whose livelihood is at stake, but also from the part of those who, at least in theory, stood to gain from the proposed scheme. The Gezira scheme is such a project, counteracted by the farmers involved. These farmers reacted to the scheme by 1) evasion of the rules, using methods that worked better for them and 2) obstruction. For them, it was more economic to cultivate *bir-seem* for cattle fodder, and cereals for bread, than the intended cash crop, cotton (Barnett 1982).

Farmers' supposed laziness or stupidity is usually blamed when a development project fails, and the largest share of 'new lands' is abandoned again (Widstrand 1979, p. 141). The reproach does not, as a rule, seem to make much sense. The newly reclaimed soils, where local communities are resettled, often turn out to be marginal. Not just do the new settlers, who originally may well have been transhumant cattle ranchers, have to learn to adapt to sedentary farming and lifestyles, but to get any yield out of poor soils, they will need very specific skills no one has cared to teach them. Moreover, administrative control of such a huge project is usually not very adequate (Barnett 1982).

Development projects, then, are seldom to everyone's advantage. Foremost, they are technocratic projects, which, through their standardized nature, pose requirements which uneasily fit in with everyday experience, and are directed at a type of agricultural development which is, not infrequently, badly geared to immediate needs of the farmers involved.

Timing is an obvious flaw. In a dam-cum-irrigation project, the dam is, as a rule, built first, after which follows construction of the system of irrigation canals. In the meantime, farmers are deprived of their usual, natural, irrigation (the water supplied when the river bursts its banks) but also the irrigation derived from a system which has yet to be built.

War damage

In Sudan, Lebanon and Ethiopia, prolonged civil strife has paralysed water projects and maintenance. International wars such as the Six Day war and the Gulf wars have greatly polluted Middle East waters - for instance, in 1969, the Transarab oil pipeline (TAPLINE) was exploded, covering the Sea of Galilee with a layer of slick, originating from 8000 tons of crude oil.

Water politics itself is both the object of regional water disputes (Ch. 3) and domestic strife. At a national scale, communities who find their livelihood or mode of production threatened, may start some sort of guerilla warfare against the imminent water project. In Iraq, plans for such a project were apparently stolen.

Sudan is a notorious example of a canalization scheme became a stake of civil war. The Jangali or Jonglei canal was constructed to circumvent immense loss of water through evaporation in the Sudd marshes, and hence to increase annual surface flow to Egypt by billions of litres. Economic integration of Northern and Southern provinces was an additional objective. The project however is feared to endanger Southern inhabitants' food supply. Those threatened are not only tribes whose grazing grounds would be flooded, but also tribes that fear crop failure because of the altered Nile flood regime - a question of timing once again.

Attacks on the project, also related to general dissatisfaction in the Christian and animist South with Nimeiri's religious (Islamization) policies meant the scheme's early demise, which accordingly did not just become an issue but also an object of civil struggle.

4.5 Conclusion: modernization and inequality

'Agrarian policies are shaped to further a regime's efforts to manage conflict and secure authority' (Weinbaum 1982). When the state uses water projects to stimulate the economy, it makes its mind up as to which groups to favour, which to control and tie to its favours, and which to neglect. It turns out that the state's neutrality is a fiction: authorities have their preferences and loyalties just like anybody else, and, worse, have the means at their disposal to act according to those preferences. 'All water users are not equal in the sight of government that plans, builds, and finances water control projects' (Payer 1982, p. 248).

Through such fundamental choices, the state effectuates a social cleavage in the countryside (two-nation project). The most visible manifestation of thereof is a giant dam, which very directly does not just disrupt ecological, but also social systems. Disappointing returns therefore are not just a consequence of technical failure, but of social miscalculation as well.

Chapter 5: *The Water Budget*

5.1 *The Cost of Intervention*

Introduction

5.1.1 **Distortions attributable to price policies**

Same product, differing prices

Cost according to factor:

- water
- food
- energy

5.2 *Sources of capital*

Different points of departure

5.2.1 **Internal sources**

taxes

subvention and income support

5.2.2 **External sources**

Strategic rents, donors and lending institutions

inter-Arab aid

international lending institutions

food aid, trade wars and agricultural markets

the international aid regime

5.3

Conclusion

5.1 *The Cost of Intervention*

Introduction

Since 'the state' is taking centre stage in this analysis both as a political and an economic actor, the 'national economy' must be the unit of analysis.

To describe internal transfers, I will focus on subvention on the one hand, taxation on the other. My analysis will limit itself to water, food and energy; water, naturally, being the study's main theme - food and energy, as the basic preconditions for economic development. This 'financial' Chapter discusses the national account of cost (subvention and imports) and its counterpart, benefits (foreign currency, taxation). One might be tempted to just limit one's focus to macro-economic inconsistencies, but the situation is more rather more complex than a simple credit-debit account can uncover; many benefit-generating assets, such as oil stocks and irrigation projects, have their ecological, social and political (legitimacy and stability) cost, which may only be counteracted at a price.

Taken together, these economic costs contribute to the financial outcome of state policies, as shown in this simple flow chart:

* policy - effect - cost account

The cost account, in turn, shows the need for financial means. The Chapter will indicate, without going into figures and details, that a little coordination and planning could have reduced the bill. Section 5.2 will discuss the sources of income tapped by states to bridge the gap between receipts and outflows. These sources, which are quite often outside donors, bring benefits carrying a different sort of price tag: political cost. Since donors like to have a say in the ways their money will be spent, conflicts may arise between the distributive nature of state expenditure as examined in Ch. 2, and calls for financially sound management.

5.1.1 Distortions attributable to subvention policies

So far, the analysis has mainly focused on allocation of water, which has to do with quantitative (q) aspect. Since economics is always about q and p (price), this section will zero in on economic distortion attributable to subsidies and price policy aspect, whereby motives for intervention will be addressed first, followed by a succinct discussion of its operation and effects.

Agricultural subvention appears to serve a four-pronged objective:

- an incentive for improving productivity
- control
- interaction and integration into the economy
- forging of loyalty bonds

First, I will differentiate prices as they emerge at different instances of the economic cycle. Food, energy and water, are both inputs and outputs, since they are consumed by producers and consumers alike. The same product, then, is sold at varying prices, depending on its function in the economic process.

Same product, different prices

There are three instances of the *production* process where subvention and investment aid come in: input, output and consumption. Through investment in development projects (dams, irrigation, land reclamation) and means of production (tractors, fertilizer) the potential for production is increased. Sustained legitimacy (Ch. 2), employment, higher output or higher value added may rank among beneficial outcomes.

In an economic sense, though, subsidies distort the cost price of production $|p_1|$. Freshwater is supplied by the state at high production cost, but the producer is charged little to nothing. The state subsequently purchases a certain share of agricultural output, food, at a fixed price $|p_2|$. This price $|p_2|$ is unlikely to be the same as the price $|p_3|$ at which the food is delivered to the consumer. The difference p_2-p_3 is, again, footed by the state.

This differentiation makes it hard to venture any realistic estimate of economic cost. For agriculture, a likely side-effect of price distortion may be that marginal plots which, at realistic cost estimates would be declared economically unviable, are kept under cultivation. As the biggest consumer of water (around 80%) agriculture also takes a majority share of non-rewarding forms of water utilization, in other words: direct (water wastage) and indirect (soil erosion) loss. Moreover, water, food and energy are not just 'raw materials' for the agricultural sector, they serve the same purpose for industry. Subsidized water thus artificially depresses the sales (exporting) price of agricultural and industrial goods. Distorted production and sales prices of food and water finally 'falsify' the cost of labour: they keep wages artificially low. This seems a compelling motive for the state to continue such policies.

Typification of price distortion

So far, I have concentrated on the economic side of price distortion. As I will demonstrate shortly, though, in the hands of the state, prices may serve a political purpose. I will typify these distortions to create some order. Price policies as pursued by states entail price distortion in three flavours:

1. the state sells the product (water, food, energy) way below cost price;
2. the state differentiates between social groups (2a) or economic sectors (2b);
3. the state differentiates among products.

Distortion of the first kind, absolute price reduction, invites the wastage of a scarce commodity: subvention means some economic loss. The second kind, intersectoral, may uneven development among sectors. The third type, interproduct distortion, may imply suboptimal allocation of the scarce water resource, but also unanticipated side-effects.

* Fig. 5.1: Political and economic aspects of state intervention in key products

product	intrinsic value	scope for control of domestic prod.	for external aid
water	low	high	low
food	medium	low	high
energy	high	high	low

Cost according to factor

Water, food and energy are all considered strategic goods. States wish to control these goods as best as they can. However, domestic production of water, food and energy may prove unreliable due to crop failure and drought, and create the need for imports. The choice for either imports or domestic production, then, has as much to do with controllability of production, as with cost price.

In this section, I will investigate effects and side-effects of both domestic production, imports and pricing policies. Thereafter, I will look at the effects of agricultural subsidies, aimed at modernizing the sector.

Water supplies

Imports or self-sufficiency?

Water, as compared with energy and foods, is seldom imported from abroad. Unanticipated scarcity therefore cannot quickly be eliminated. In water-poor areas, and in dry spells, the state operates the quota instrument, to prevent an even higher rate of supply depletion. But those states exporting agricultural produce are much interested in favouring (industrial) farms. A confluence of agricultural and state interests therefore serves to uphold such a state of affairs.

The present per capita cost of supplying the (whole of the) Middle East with freshwater runs at about US \$300 (Starr/Stoll 1988). This cost, however, is incompletely expressed (no/low charge) in the sales price of water to the consumers: a distortion of the first kind, spurred by political considerations.

In water-rich states, where water supplies are diffuse, access to water, by definition, would determine cost price. Such states need a large administrative apparatus to uphold their monopoly of ground water pumps and stream diversion. Israel and Egypt command such extensive structures of control.

In water-poor states, governments find it easier to hold a monopoly, and therefore, it would be practicable for them to charge each household an equal fee, set quotas and rations should the need for it arise. In practice, though, water is generally allocated as if there were no limits to supplies. Only in times of extreme drought, quotas may be set.

|BOX 5.1| Differentiated charges

Government may have reason to charge some users more than others. The example of Israel comes to mind. As explained in Ch. 3, the Israel authorities have encouraged or silently condoned the spread of settlements for Jewish citizens on occupied territories, while aiming to concentrate, and thus control, Arab inhabitants. Failure to conform with regulations aimed at concentration implies Arab communities are deprived of water and sanitation services. In the occupied territories, Israel differentiates among Jews and Arabs when charging water fees. In so doing, any effort at boosting Arab productivity is nipped in the bud, with health risks for lack of adequate water quality standards. Quota measures also fall flat for political reasons. In the Israeli settlements, Mekorot, the water utility, systematically allocated colonists a 10% higher quota than set by national authorities (Jerusalem Post 1991).***

Pricing

As a function of the unpriced character of water delivery, there is conspicuous wastage of valuable resources on the production side, Water development is seldom done in an efficient way, especially where exploitation is easy and low-cost. The prospect of economic growth and social integration to be provided by hydropower and irrigation projects cannot obfuscate the sad fact that the sheer size of water works appears to imply bad water supply management as if by definition. The radical environmental effects are by now familiar: erosion, salinity, siltation, pollution. All these factors contribute to the impairment of long-term productivity.

Another hidden cost of production is an overly optimistic estimate of production capacity or availability of foreign market outlets. With a view to capacity available, there is underproduction, but in the face of market conditions, a share of that same production may even be termed overproduction.

These arguments are generally familiar from earlier observations. I would like to add one last consideration, though: that of technical innovation. Such innovation would not seem to make much sense, while its cost looks prohibitive relative to the artificially low water charge.

There is no incentive whatsoever, then, either to resort to existing, more efficient techniques (e.g. sprinkler or drip irrigation), or to release research funds for stimulating water conservation techniques.

Food supplies

Imports or self-sufficiency?

Notwithstanding (belated) investment in agriculture, most states find it impossible to meet strongly increasing demand. The inflow of food from predominantly Western sources has greatly increased since 1973.

All Middle East states, except for Turkey, are now huge net importers. Different factors have played their part (time dimension running from left to right):

higher oil revenue - greater purchasing power - increased food imports - higher strategic rents

Both internal and external developments contributed to this chain of events: internally, the population explosion, equally rapid urbanization and a prolonged neglect of agricultural sector (Ch. 4). A key external factor was the declining world market prices for staple foodstuffs due to US and EC export subsidies, to get rid of spiralling production surpluses.

A shortfall in food supplies is a potential source of unrest the state obviously wishes to avoid. A guaranteed food supply is therefore a problem of legitimacy. The continuous (t) availability of cheap (p) food in sufficient quantity (q) develops into an acquired right, from which there is no turning back.

With a view to maintenance of legitimacy and control, food imports bestow important advantages on the state. Supplies are more or less guaranteed, no matter domestic crop failure; distribution is easily monitored. If the state diversifies its sources of supply, this consideration may well be deemed sufficient to compensate for greater dependence on the outside world (and cost); whereas oil and water suppliers are few and far between, food exporters are not.

For strategic reasons, though, it is the oil-rich, water-poor states which have started to stimulate their agricultural sector at enormous expense, through costly and prestigious agricultural projects. The first objective (level I) is to be less dependent on imports; in the second instance, home-grown food (and, perhaps, electricity) could be an appealing source of foreign currency.

Oil states feel no urge to mind the poverty of their resource base for food production, which increases the production bill to five or six times the world market price. Energy rents will take care of these costs. In the rich oil societies, centralized control should not be a problem considering their small size. Other states control their agricultural export sector by bureaucratically led industrial agrocomplexes.

As a consequence, a somewhat paradoxal situation arose where the traditional exporter, Egypt, has become an importer of cereals, as the agronomically underendowed Saudi Arabia has worked its way up to cereal self-sufficiency - the country has even become a net grain exporter.

Pricing

Agriculture is the pre-eminent sector where government manipulates prices with a view to a chosen road to development (Ch. 4).

Key strategies are:

- price fixing: the agricultural sector bears the brunt of urban and industrial development. In fact, this is tantamount to taxing the countryside;
- price differentiation between crops (distortion of the third kind).

The subvention system employed in most states fosters the cultivation of water-intensive crops, making for a quick depletion of available stocks. Price interventions may be so badly coordinated that bread is fed to chickens, since subvention kes it cheaper than grain. Price distortions such are in use in Egypt moreover promote social inequality (a point which has been extensively debated, a.o. in extensively debated Richards/Waterbury 1990). They tend to favour the rich farmers, since only they can afford HYV. Only those farmers command the means to evade the regulations through switching to unregulated, resource-intensive produce (e.g. vegetables, fruits, dairy).

Energy supplies

Imports of fossile energy sources or hydro-selfsufficiency?

The oil boycott of 1973, what with its consequent price hikes hit Mashreq non-oil states as hard as it did the West. During talks in the framework of a New International Economic Order, a 'two-price structure' has been suggested, consisting of a high price for rich consumers, a low one for poor consumers. Oil producers, though, who did not think prices unfair at all, torpedoed the plan (Terzian 1985, p. 210).

Although it is true that oil states did compensate some states for their higher cost (Yemen is an example, cf. Korany & Des-souki 1984) through an income transfer, energy has remained a pricy import commodity.

It is not surprising, then, that the water-rich states have resorted to hydropower stations, which transform their hydraulic potential into cheap electricity. Water and hydropower have not yet developed into a trade commodity. The aspect of control is not a pertinent argument here - dams and power stations are sufficiently centralized to ensure control. But technical problems, strategic objectives and the steep cost of water transport impair the benefits of a large-scale central, imported water supply.

However, several drawbacks can be pointed out: river flow has proved to be an risky, unreliable source of energy, considering the fluctuating river regime (even made to be worse by human upstream intervention, and long spells of drought.

Pricing

In oil states, production cost is known to be very low (estimated to be somewhere between \$.50 to \$2), compared to the international going price (\$ 19 at the time of writing). These states naturally offer their citizens cheap fossile energy. It can be argued, though, that supply prices ought to be related to the rate of depletion of oil stocks.

With regard to water-rich states, moreover, the choice for hydropower should not just be related to its cost of exploitation, but also to the opportunity cost of oil imports. Such considerations do not deter states from supplying their citizens with energy at bargain prices - the cost of generating hydropower is not being passed on to their citizens (distortion of the first kind).

Conclusion

Although imports and product subsidies are a drain on the Treasury, food, water and energies are nevertheless sold at a low price. while at the production side, a disproportionate quantity of means of production (notably, water) is being allocated to agriculture. This type of economic intervention of course first of all burdens the state's financial position. After all, it is the state which bridges the difference between 'real' cost and the charged fee. But, as was pointed out in the preceding Chapter, the policies do have an effect on social relations: state meddling with sales and purchasing prices is an important influence on differences in wealth between different sectors.

5.2 Sources of capital

Different points of departure

For developing countries, lack of capital formation to finance development projects tends to be a crucial hitch. The weak domestic base for legitimacy typical of most Middle East states limits their faculty to extract development funds from domestic sources. Their population is not willing to supply such funds at great sacrifice, since returns would be highly uncertain. It is politically more opportune to give up a share of sovereign room for manoeuvre in exchange for financial, political and military support from outside sources. Acceptance of external help is a 'risk reducing political strategy' (Weinbaum 1982, p. 147).

Both oil-rich and oil-poor states pursue this strategy. However, their points of departure, and consequently, the concessions they have to make are widely divergent.

For Middle East oil states, capital formation should hardly be a problem; the worldwide importance of fossile fuels secures them a relatively stable (apart from the shocks of 1979 and 1985) inflow of revenue. But imports kept the pace as revenue mushroomed. Worse, while oil income were subject to price fluctuations and international developments, the total value of imports proportional to declining revenue proved hard to scale down. Not only have imported consumer goods become commonplace everywhere; once state services are seen to be acquired rights, they are hard to rescind. In addition, it is important to note that projects are usually delivered in a turn-key format, so that learning effects do not take place. For every new project, the recipient state has to call on Western technicians, so that notably rich Middle East states, who can best afford it, remain dependent on imported know-how (Looney 1990).

Non-oil states have much less breathing space, because of their lower export revenue, while the size of their population (human capital) is bigger. Oil-poor states which, for some other reason, are crucial to superpower foreign policy (Israel, Turkey, Egypt) derive great sums of so-called 'strategic funds' from that position.

A third group of states however, Yemen and Sudan among them, craves this rent opportunity. These states have to rely on their own productive powers (granted, with some multilateral help), and bear the full brunt of international structures and developments, which cause low cereal prices and eviction of labour from oil states. I will elaborate on several of these sources of revenue in the subsequent paragraphs.

5.2.1 Internal Sources

Two alternatives serving to improve the budget are to impose taxes and to scale subventions down. But in both cases, the problem of legitimacy is rearing its ugly head.

taxation

Domestic extraction through taxation does not just replenish the state Treasury, it functions as an instrument for redistribution of income, lessening *social disparity* in turn. Most states in this region however would not dream of levying substantial direct taxes, say at West European levels - that would amount to mortgaging both administrative capacities and state legitimacy. In the public sector, taxes and social securities are simply deducted from wage transfers, but outside that sector, states find it very difficult to collect taxes (Richards/Waterbury 1990, p. 225).

Indirect taxation can be levied on goods and land. A relatively moderate land tax (Richards comes up with a flat 9% rate), would alleviate the most pressing financial needs of agricultural states (1985, Ch. 1). Land tax appears to be out of the question due to a powerful oppositional factor: the settled, rich landowners (Richards/Waterbury 1990, p. 157; Weinbaum 1982). This is not to say that any form of taxation is to run aground. Reasons of more lofty concern back up and legitimize religious (*zakat*) and pan-Arabic (Korany/Dessouki mention a PLO levy in Kuwait) taxes.

subsidies and income support

Thanks to an oversized state sector, the state has directly subsidized urban labour. Civil servants work at a guaranteed wage on a job, the productive value of which is often quite low. Of late, the state has extended its support to the countryside, handing out subsidies in the form of attractively priced services, low-cost means of production and intermediary products, with a view to modernizing the farms sector.

There are some drawbacks of a financial, an ecological and a political kind. Apart from its direct cost, this modernization effort has an unpleasant side effect on the balance of payments. Due to delayed technical development, some states are hardly able to supply the required means of production, which necessitated imports, raising the trade deficit in the process raised (Ait Amara 1987, p. 149).

The promotion of fertilizer and machines is subject to environmental qualifications. Indiscriminate application of fertilizer will, in the long run, lead to saturation and eutrophication problems, while machines may break up fragile soil structures, causing erosion of marginal lands. Restoration efforts may prove a costly affair.

Cutbacks on subsidies are both an economically and politically harsh solution. Efforts to scale down food subsidies have sparked unrest in Egypt, Sudan and Maghreb states. Distributionist states will think twice and possibly a couple of times more before implementing such measures. When they do, they have been pressured by aid and lending institutions.

Middle class citizens undeniably benefit greatly from a form of income support which, at least nominally, was designed for the poor. They are obviously unwilling to forego that benefit without good reason. But according to Alan Richards, food riots are not just an inflamed reaction to a painful loss of purchasing power. Richards (1986) offers instances where the population is ready and willing to make some sacrifice:

- 1) in a war of liberation or a combat of, say, an arch-enemy;
- 2) in a policy package which compensates the poor for their loss in some other way, as has happened in Algeria.

In Richards' perception, food riots are in fact equity riots: the poor resent for having to give up what humble means they have, while others 'conspicuously' benefit from the rentier bounty. Again, the tolerability of subsidy cuts lies in its perceived legitimacy (Richards 1986, p. 14, 15).

5.2.2 External sources of income

I will briefly touch on some drawbacks of various types of rent income before proceeding to discuss the source most relevant to water projects: international aid and lending institutions.

| BOX 5.2 | Hidden cost of rents

Contrary to 'regular' industrial and agrarian markets, the difference of cost and benefit is very high in the oil trade. Those profits simply seem to fall into the state's lap, in its capacity as proprietor/lessor. Other types of rent, such as the Suez Canal, seem equally easy to reap. Thus it is tempting to view the concept of 'rents' as getting 'something for nothing'. But, whichever way one looks at it, rentiers are liable to incur some cost, risk and effort, as this diagram should make clear:

type of rent

cost, effort or risk

sales of fossil fuels

depletion of a non-renewable resource, speculative prices vulnerability

rights of passage
(SUMED, Suez)

labour remittances

job itself; political insecurity

strategic rents

international political

instability

loyalty/patronage

development aid

uncertainty; politically motivated conditinality

It is questionable whether different types of rents make for a sensible comparison. The costs and benefits a state incurs or takes are sometimes of an economic, sometimes of a political nature, sometimes of both kinds. ***

Labour migration

Labour migration to oil-rich states may well be seen in terms of exported labour power. Although workers, who are predominantly rural, may have to make do with lesser skilled work than would fit their level of education, they are earning a much higher wage than they would make at home. Part of that revenue is transferred to families back home.

The state endeavours to tax these transfers, as a source of rent income. Although a major share of taxable transfers never reaches the Treasury, the state benefits from the inflow of unrequited transfers in an indirect way, since it saves the authorities from having to hand out funds to alleviate poverty, to buy legitimacy. Lisa Anderson correctly notes, though, that the windfall (political) profit may be short-lived. The transfers rain down on rural families in unequal measure, which is bound to give rise to social tension. Moreover, the funds which do not accrue to the state are frequently used to start private businesses, which remain independent of state control (Anderson 1987).

Recent developments, moreover, have already started to reduce the flow of transfers. Falling oil prices did not just cause the volume of rent income to drop, but also transpired the regional rent system (Ch. 3). As a spin-off, demand for migratory labour is dwindling. This situation has been aggravated by political events: after the Gulf War, Palestinians and Yemenis were expelled from their host countries for their pro-Saddam stance during that war, to be replaced by Asian workers.

Strategic rents, donors and lending institutions

Due to the state's limited capacity to extort funds from domestic sources in a legitimate way, external sources press heavily on the state budget. To the state, this international dependence is priceless, but it will be argued that it does not go without a heavy price. Financial patronage implies that the recipient states will have to pay in a different, political, currency:

- 1) loyalty to US policy guidelines, and
- 2) acceptance of interference in decision-making - that is, interference from without.

| BOX 5.3 | Interference from Without

Turkey, Egypt and Israel are now the biggest recipients of American foreign donations and loans.

The shining example of *Egypt* shows how it really pays to accept American policy guidelines. Upon learning of Egypt's willingness to participate in peace talks with Israel in 1979, the indignant rich oil states immediately cut off all aid transfers to Egypt. As a quid pro quo, Egypt became the second biggest recipient of American foreign aid. The state even repeated the trick in 1991, when in exchange for political and military support of the anti-Saddam coalition, President Hosni Mubarak secured the forgiveness of tens of billions' worth of Egyptian debt.

Israel, on the contrary, was denied the development of a desalination works, since US aid officials considered it uneconomical. The conditional cancellation of loans serves as a lever to influence Israeli settlement policies. ***

Notably where extraregional sources are involved who now and again have to be placated through far-reaching concessions, the state is prone to meet with *domestic* reproaches, formulated in terms of a moral sell-out. The political choices and commitments a state makes are not seldom disputed by sections of the population (one only needs to recall the Second Gulf War, cf. Aarts 1992), and may provoke a crisis of internal legitimacy; yet, it can also raise the ire of other, extrastatal actors - Kuwait, notably, has been accused as the outpost of Western imperialism. Religious esentment may be voiced both against the interest-bearing nature of loans sparking off and loyalty to and dependence on the infidel, imperialist Westerners.

In this section, I zero in on consequences of a different kind: the interference with economic relationships (inequality) and ecological preconditions (environmental damage) brought about by the nature and conditions of development aid. But first, I will quickly touch on the supposed relation between political and economic liberalization, and what it has to do with aid policy.

Inter-Arab aid

The percentage of GNP oil states allocated to development assistance, it has to be acknowledged, is more impressive than the corresponding figure for OECD states. But there is a downside: a disproportionate share of that percentage befell on fellow Arab states. The table below demonstrates the sheer size of such sums.

** Table 5.2: 'riyal politics'*

Transfers in millions of US\$, 1970-1980; adapted from Korany & Dessouki 1984.

Egypt	1207.7
Lebanon	38.1
Yemen, N.	599.2
Yemen, S.	100.0
Sudan	213.9
Oman	100.0
Syria	469.9

Motivations for inter-Arab aid proved to be far from idealistic. The loans and donations stemmed from ideological solidarity, but they were certainly inspired by the desire to establish and sustain a position of dominance within the region, which had already started by the regional spread of the rent economy. The transfers successfully generated the intended political loyalty and economic patronage, a strategy which, with a pun on the Saudi Arabian currency, has been termed 'riyal politics' (s. Table below).

Recipient countries found themselves 'caught up in the donor's economic orbit and strategic plans': there were some strings attached to the aid effort. Recipient states' enthusiasm was dampened, when they found assistance to be inadequate, badly coordinated and delayed (Weinbaum 1982, p. 140). Falling oil prices have not just caused direct rent income to fall, but also impinges heavily on the regional rent circuit. The dependent position of the recipient states comes to the fore, when the donor's source of wealth dries up. Inter-Arab aid is one of the first structures to fall victim of a decrease in oil revenue.

extraregional aid: international loan agencies

One of the *infitah's* main objectives (s. Ch. 2) was to gain access to international capital, to finance sky-rocketing imports and project investment. It would stand to reason to suggest that economic liberalization is most likely accompanied by state acceptance of a greater degree of political participation. However, of all *infitah* states, only Egypt has a (modest) form of democracy, which, incidentally, actually dates from earlier date. The assumption does not stand up to examination.

Although official statements may give different impressions, neither the state nor the transnational financial sector is showing itself particularly keen on democratic tendencies (cf. Luciani 1988). First of all, providers of capital demand political stability, since that is the best guarantee they will see back payment within their lifetimes. For, nationalization of foreign capital was a prominent feature of different Third World revolutions in the 1950-1980 era.

Banks have also learned from the turbulent experience of the late 70s, when million dollar loans changed hands like one changes one's clothes, and returns seemed guaranteed. In the early eighties, insolvability was ubiquitous, acerbated by the soaring dollar. Since the interest burden and back instalments as a share of total budget will rise over time, a heavy debt burden will put the economy under increasing strain. This in turn is to render the acquisition of new loans ever more taxing. Chances that, in time, any debt will be rescheduled or forgiven by commercial banks are fairly slim.

bilateral and multilateral aid

This gloomy prediction is much less valid, though, where bilateral and multilateral aid projects are concerned, the political character of which tends to be much more marked. Here, the donor states have a political stake in the wellbeing of specific recipients, which interest is used as a lever in the hands of the latter with which to demand more lenient treatment. Bilateral aid constitutes an ideal environment for superpowers to adapt their conditions and aims to the framework of foreign policy objectives. The importance of the recipient state in fostering such goals is a determining factor for a state's leverage in talks. While both superpowers were still exerting themselves to win the states in the region over to their sphere of influence, In the context of Cold War effort, playing the giants off against each other enabled the region to attract the billions of dollars needed to pay for dams and irrigation projects.

Egypt's political somersault to finance the Aswan High Dam is a familiar instance, whereas the USSR supported giant projects in Turkey, Syria and Iraq. In addition, the need for regional stability in a potential tinderbox area, which in turn requires a strengthening of domestic stability and structures of control, incite donor states to be more clement and accept more concessions than it intended. Though teetering on the brink of financial bankruptcy, every grudging reform or constructive peace gesture secures politically moderate Egypt with enough goodwill to win another round of negotiations (Richards 1990, p. 3).

food aid, trade and agricultural markets

The world food market is often, not incorrectly, called a dumping ground. Taking advantage of the fact that cereals can be stored for a considerable time, contrary to, say, vegetables, TNCs such as Cargill can influence prices through their control of very large stocks, which they can put into or out of the market at will. Besides, EC and US agricultural subsidy systems distort the market through their sheer size. It can be argued, then, that world grain prices are far from realistic reflections of scarcity relations.

The current subvention war makes it hard for Mashreq agricultural states to specialize in cereal production. Since cotton, vegetables and fruits are likely to fetch higher prices, they are more obvious export products. Notably horticultural produce and citrus fruits are highly water-thirsty as compared to cereals (s. also Appendix to Ch. 1).

For regional producers, there is one more threat from without: aid programs. Contrary to oil aid (promised but never delivered by Iraq to poor states in the Second Gulf War) or water aid (Syria to Iraq during the First), food aid is still much in vogue as an income transfer in kind. The benefits of food aid are both of a political and economic nature.

Foremost, food is considered a powerful diplomatic lever. Both Richards/Waterbury and Weinbaum estingly argue that food aid should not be overestimated as a mechanism for control, since it is not obvious exactly what concession should be granted in exchange, while compliance is not guaranteed. The suppliers of food aid seem to reason differently, notably the US. Public Law 480, which surveys food aid, constituted an important tenet of foreign policy (Dethier/Funk 1987). Since food aid was deemed instrumental to winning the Cold War, the region benefited from food donations both from the part of the US and the USSR, the latter granting aid (notably between 1954 and 1978) to all states in the region except the Gulf oil monarchies.

The EC, on the other hand, usually grants food aid to those countries to which its member states have had colonial ties - foreign policy motives seem less compelling (Weinbaum 1982).

Economic consequences for both donor states and the recipient region can be said to be quite radical. For the supplying actor, food donations are a welcome outlet for surplus, which came about through spiralling production, in turn the consequence of comprehensive, uncontrollable domestic subvention programmes. But aid also constitutes a potential new market opportunity, since consumption preferences on the receiving side will change in the long run, arguably along the lines of those very surplus products.

At the regional level, food donations and concessional sales hamper the development of a regional agrarian markets. Regional suppliers cannot compete with heavily subsidized food donors. In the receiving state itself, finally, the influx of 'free' food puts a brake on the development of a domestic agricultural sector. Here, too, producers go out of business since food is supplied at cut-throat prices from external sources.

the international aid regime

The structure of global aid institutions is set up in such a way that each state's managerial input is proportional to its financial contribution, contrary to the United Nations voting system. Consequently, no matter how internationalist the stated aims as voiced by World Bank and IMF, their managers are not exempt from taking cues from foreign policy priorities and economic philosophies of major depositors, the United States ranking foremost among them (Waterbury 1979, p. 103).

The United States indeed have a rather disproportional say in the allocation of funds to development projects. Allan (1988) indicates to what lengths the entanglement of interests may go.

- 1) The US is greatly interested in exports of food surplus and expert services. While the US and EC battle for market shares through selling their surplus output way below cost price, they force Middle East producers into more water-intensive cultivation.
- 2) A state which embarks on a development scheme typically lacks (some of) the expertise to realize it. Projects are generally on offer in a package deal, to be accepted in one piece. Exports of complementary know-how are, as a consequence, a welcome spin-off benefit for the aid-granting state.

3) Moreover, projects are supposed to reap visible effect immediately, since the US, the biggest contributor of aid, does not wish to invest its tax money in projects which are difficult to monitor. The short term yield therefore needs to be impressive. Likewise, aid institutions are unwilling to support any new reclamation projects in Egypt (so-called New Lands) on top of current projects, which had started in the 1960s. Incidentally, the World Bank does appear to have a point in this case, though. New Lands have generally proved to be marginal. It is instructive to know that only 10 per cent of any land reclamation scheme in the region survives, i.e. remains under cultivation (Beaumont/McLachlan 1985).

Nevertheless, the IMF and World Bank cannot simply be dismissed as 'American' institutions, while other rich donors, both European outsiders (France) and regional neighbours (Saudi Arabia) included, are equally interested in regional stability and economic liberalization (cf. Richards 1990, p. 23). Thus, there seems to be a hegemony of philosophies that are realist rather than idealist, monetarist rather than Keynesian, financial rather than social in nature. Tellingly, '(e)ven the World Bank no longer loans to heavily indebted countries unless those countries receive's IMF's "seal of approval"' (Wenger/Stork 1987, p. 17). Contrary to the World Bank, which also undertakes research and draws up development plans, the IMF is not necessarily expected to undertake actions to promote development. IMF is more than ready to help out a state facing a worrying budget or foreign currency deficit, but only on conditions that foster international trade.

Let us take a quick look, then, at the building blocks of IMF conditionality. In exchange for funds, the institution generally demands compliance with the following stabilizing measures:

- cutbacks on public expenditure. Since the IMF does not seem to be particularly interested whether austerity measures concern defense or agriculture, this demand may be non-discriminating.
- trimming or cancellation of consumptive subsidies. Food, water and energy prices will rise, eroding the legitimacy base.
- monetary devaluation, the net result of which may be improvement of a state's exporting position, but worsening investment position on the international financial market.
- elimination of trade barriers, which were meant to protect 'infant industries' against foreign competition.
- more restrictive credit policies. Interest rates will rise as a result, which makes it harder for small farmers to get hold of investment loans to modernize (Wenger/Stork 1987).

It is easy to see how such conditions frustrate projects aspiring to counteract social imbalances and to conserve the environment. The consequence of a financially 'correct' policy, which is to say removal of exchange rate and price distortions, has to be for the less well-off to suffer. It is interesting to take Wenger & Stork's assertion to heart (*ibidem*), saying that aid policy engenders greater social tension and puts domestic stability under pressure. In the framework of what has been discussed in the present Chapter I must conclude, then, that the conduct of international financial agencies badly contradicts their own precondition for issuing loans - that is, the precondition of social and political stability!

5.3 Conclusion

Aid institutions are correct in criticizing governments for distorting prices and wasting money on unproductive projects. Not only is the rationality of export agriculture in arid areas dubious; distorted price relations and social relations are an undesirable consequence. Their recipe though (budget slashes, high interest rates, lowering of exchange rates) may well be worse than the ailment. To be sure, water consumption will in all likelihood be rationalized in accordance with IMF's directions, but it will widen social gaps even further. Unsubsidized water would be above almost anyone's household budget: in the least endowed states, per capita annual income does not exceed the real cost of freshwater supplies by much (cf. Table 3.1.1).

There is much to say against IMF conditionality: symptoms are addressed rather than causes, as a consequence, no structural contribution to problems of development are on offer, while economic, social, environmental problems are liable to be aggravated. None of the two alternatives fit in well with the problematic at hand. A tentative 'third road' will be indicated in the next Chapter, which include conditions doing justice to the relation different social groups and between man (m/f) and his environment.

Note:

- (1) In addition, the hidden social cost cannot be underestimated. The literature draws attention to social stress resulting from resettlement, flooding of agricultural land and industrial sites, religious sanctuaries and archeologically important sites - cf. also Chapter Four.

Chapter 6:

Toward an explanatory model on politics of water scarcity

- 6.1 Introduction
- 6.2.1 Dimensions of problem and solution strategies
 - perceptions and policies
 - multi-level aspect
- 6.2.2 Inventory of problem dimensions
- 6.3 Toward criteria for solutions
 - doing more with less?
 - key concepts
 - dimensions of opportunity and risk
 - problem levels
- 6.4 Classification of proposed solution strategies

6.1 Introduction

With the help of the information which has surfaced from preceding Chapters, I should now be in a much better position to make my contribution in indicating and describing factors which explain why states and aid-granting agencies do not always opt for the most efficient solutions.

These factors are of consequence for an assessment of proposed solutions. Such an assessment lies outside the scope of my problematic, but, drawing on information highlighted in this study, I will develop a set of criteria by which such solutions may be classified in order of efficacy.

In the Framework, I have redefined the problem of scarcity as a problem of fine-tuning. My definition of 'loss' served as a central theme. By the standards of this broad interpretation of loss, the preceding Chapters have displayed an impressive parade of loss and failure. Bad water management can be indicated at every step of the cycle of water development. The following flow chart summarizes these stages (upper row) and critical variables (lower row):

generation	distribution	allocation	use	disposal
yield	maintenance	access	price	ecology health

As John Waterbury has correctly noted in his *Hydropolitics...* (1979) many of these management failures could very well have been prevented, or counteracted, by better planning, fine-tuning and dosage, along with the readiness to cooperate at the regional level and to consider the problem in a broader geographical context, with due regard to user interdependence.

This wastage could be dismissed as an unfortunate waste of money, fertile soils and water, which is bad enough in itself. But with the loss of this supposed 'bathwater', opportunities for development and welfare (the 'baby') can disappear as well.

Yet, it is valid to assert that some aspects are more fundamental to the problem than others. Sometimes it will have to be concluded that these barriers are of such a structural nature that their consideration would be irrelevant without embedding them in a broader context, such as the problematic of the rent economy. Seen in this light, it will be especially useful to enumerate the problem's characteristics in a more systematic fashion.

6.2.1 Dimensions of problem and solution strategies

perceptions and policies

Efforts to combat the water problem in the Mashreq, as a rule, still tend to be aimed at extension of supply in the face of ever rising demand and utilization, instead of control and conservation. An inquiry why so little is being done to limit loss is equivalent to the question why present use is being carried on (*inaction*).

In the first place, there is an apparent absence of the perception of scarcity. A problem must first be recognized before there can be any question of considering solutions. The Egyptians, for example, have long lived with the reassuring conviction they had more water at their disposal 'than they know what to do with' (Richards 1979). This perception of abundance is a 'social construct', emanating from material and circumstantial preconditions.

I define perception as the (selective) interpretation (C) of fact (A) and interests (B), in which 'fact' correlates with the state of technical expertise and financial (im)possibilities, whereas 'interests' are related to actors' economic and societal position ('where you stand is where you sit'). Policy, then, is the concrete outcome of the dominant perception of a problem. This policy is enacted under the influence of conflicting social conflicts of interest (*politics*) inside an established political-institutional structure (*polity*). These domestic factors again cannot be separated from international structures of trade and aid, the framework in which states operate (cf. van der Wurff 1992, especially p. 22 ff).

This fits in nicely with my main focus: considering my field of endeavour is International Relations, political factors have obviously drawn most of my attention. Due to the state's importance both as a political and an economic factor, the state had to be accorded most emphasis in the analysis.

Therefore, I have opted for the state to take centre stage, a state operating both at higher levels, such as the 'river basin' and the 'region', and at lower ones, consisting of 'domestic political actors and economic sectors'.

At the higher as well as the lower level, the state draws up a plan to modernize the economy, it mobilizes resources and people, trying to manage those with administrative and other structures of control. Regardless of whichever official ideology is voiced, however, the motive of self-continuation seems to hold a prominence equivalent to that of wealth and welfare for all. There is a vivid impression that 'survival' has become a (first-level) aim in itself for states throughout the region.

6.2.2 Inventory of problem dimensions

Once recognized, the problem of scarcity turns out to have a multi-level aspect. As explained earlier, I am inclined to split the problem three ways, distinguishing technical (I), economic (II) and political (III) factors. Social and financial factors in turn impinge on politics and the economy.

technical dimension

The technical aspect of scarcity does not just lie in local availability, exploitation and distribution of fresh water, but also in *information*. The literature reveals a nagging shortage of quantitative data and understanding of effects. When even *approximate* answers are incomplete, the predictive value of data available can be but of minor significance. Shortage and floods, then, are prone to return again and again. Technocratic approaches such as Starr & Stoll's (1987) tirelessly stress this point.

The available quantity of water can be extended through hi-tech remote sensing techniques and new water works: exploitation through pumping, damming, canalization, desalination and the like. Inadequate means or poor assessment of the conditions causes loss at the well. Moreover, canalization and damming may well mean spatial displacement of the problem of scarcity, within or across state boundaries, while ecological and social disturbance (notably resulting from dam construction) are likely to be grave.

The dominant technocratic optimism hampers a scarcity-directed approach. In many cases, such optimism is belied by ignorance of essential data. The High Dam at Aswan, the largest barrage in the region, 'was obviously planned without taking into consideration the special features of the Nile river and its behaviour over the year' (Waterbury 1979, p. 104). The inclination to see projects only in mega-terms is encouraged both from the part of the supplier and the buyer.

Giant size, complexity and cost is natural, since, 'nothing can be too good' for the spending state, for which a project serves as a legitimating factor. For the engineers involved, the challenge of complexity has the greatest interest. Such complementary interests bar the review of other, small-scale options, even when eventually, giant projects turn out to generate structural overcapacity.

Where politically inspired regional solutions are aired, such as Ozal's Peace Pipeline and the Wachtel plan, hydrotechnical objections with regard to flow and quality tend to be overlooked. Lax maintenance of distribution canals and insufficient availability of materials and tools for repair explains up to 30% of the difference between quantities tapped and used (Biswas 1991).

economic dimension

The economic use of water also entails great loss. Overpumping (mining), pollution and salination are three main problems, solutions for which require financial, technical and structural investment. This, however, is inextricably linked up with a basic change of mentality directed at a more sustainable complex of consumption, which itself in all probability is also the very precondition for proceeding to such investment.

- Since the system of subsidies and state prices obfuscate the real cost of water, a correct assessment of cost and benefits is complicated assignment. Uncertainties at a technical level make it even harder to assess the economic cost price of water projects in any realistic fashion. Yet, apart from all these considerations, the cost estimation itself seems amenable to commercial (from the part of the advisor) and political (buyer) distortion. Interestingly, the answer to the inquiry which of the two is cheapest, desalination or pipe transport is subject to your choice of interlocutor.
- Dependence on one source by many entails an elevated degree of user interdependence. Wherever *upstream* supplies are interrupted, those unfortunate enough to live *downstream* suffer. Consciousness of this interdependence is an essential precondition for domestic and interstatal cooperation.
- At first glance, continuation of large-scale water allocation for agricultural consumption seems to be in the best interests of many rural people. In many states, however, the relative contribution of the agricultural sector to the economy is not impressive. This does not only hold true for oil states, but also for a production state such as Israel. One might counter that subsistence agriculture should be cherished for social reasons, employment standing out. As for the oil states and for Jordan, though, this line of reasoning does not stand up to scrutiny, either, since there, agricultural labour needs to be imported.

political dimension

a. domestic

Only last year, in 1991, a major crisis in Israel broke out following a devastating report by the State Comptroller on agricultural water allocations, which led to the resignation of the then Water Commissioner (Jerusalem Post 1991, *World Water* 7-91). I have declined to go into institutional territory, yet it would seem that this example must be the tip of a very murky iceberg, even more so if one takes note of Sexton's observation that '(h)istorically speaking, water institutions in the Middle East have had little jurisdiction over how water demand has been constituted (...) A major part of water policy decision-making has been carried out de-facto by the agricultural sector'. The tie-up of water management institutions and agricultural interests, combined with the lack of structural legitimacy and international power relations serve as political constraints for recognition, leave alone heeding the need for a more rational water allocation policy.

Wastage and hidden cost, as pinpointed in all preceding Chapters are partly attributable to state actions and inactions. The state's strivings for (keeping up) control are aimed at sustained growth, as well as stability (=status quo), which is generally thought to be a key precondition for growth. The need for foreign funds, to pay for development projects and writing off debt, self-imposed development targets and the very real nightmare of an unstoppable population explosion, and, not in the least place, the legitimacy deficit spur states towards new projects. Efficient water use, then, is not a priority. Yet, even those state officials who do recognize the need for water conservation face nearly insurmountable barriers. For, in order to maintain legitimacy, they find it expedient not to intervene too profoundly in the societal framework. For that same reason, the state cannot easily tap domestic financial resources by means of taxation (see below).

Again, for projects to be large and imposing is a legitimacy-enhancing feature: the state shows itself to be 'with it'. It is 'easy' being modern too: although any project absorbs money, it constitutes a new source of control and patronage, which follows from the state's distributive character. It is not really possible for citizens to criticize development schemes: to do so would be to discredit the ruling regime or even the state itself.

Even with the hegemony of what I would term the 'paradigm of scale' (bigger = better) slowly lapsing, the approach remains technocratic in nature, as long as it is not recognized that the state, as a monopolist, is far from neutral. Given appropriate means, the state is able to rectify local differences of access, but will it? The continuation of (domestic) local scarcity is a political matter where the state knowingly, wittingly wishes to strike at an ethnic minority or an economically underproductive social group. The state of Israel's attitude towards its Palestinian citizens is an infuriating example of the former, the plight of Sudanese nomads of the latter. Where integration of minorities seems infeasible or undesirable, a government may decide to leave an area to its own devices.

There is, however, an additional problem of state underdevelopment. It is, in a sense, remarkable that even the region's megacities do battle with periodical water shortages, since it is there that the state tries to consolidate and conserve its political basis. I cannot but conclude, then, that the question of inadequate supplies is a structural management problem, showcasing the *organizational* weakness of the state.

Finally, although Middle East societies are arguably better seen as Waterbury's 'class-divided' (stratified) societies than as an 'arena of class struggle', the existence of inequality and rivalry for productive resources such as water and soil cannot be denied. In many areas, wealth and water rights are linked. At the level of the local irrigation system, rich farmers, logically, live upstream from their poorer brethren. The latter's poorer access, resulting in smaller and more turbid supplies, solidifies their disadvantageous position. In conclusion, there is a relation between access to water and access to funds. Wealthy farmers tend to have much better access to credit institutions and state privilege than do small-time farmers.

b. regional

The way things looks now, the stocks of 'white gold' owned by the well-heeled oil states will be used up even sooner than their reserves of 'black gold'. User interdependence at all levels renders water wealth a focal point of political action. The unequal regional distribution implies that water-rich states will, at a future time, derive ever more political, and possibly also commercial benefits from their position. As a matter of fact, it is to be expected that alternative sources such as desalination and imports from overseas are yet bound to be costly and intrinsically small-scale.

The enduring political instability in the region, forcing states to embark on a strategy of agrarian self-sufficiency doesn't help foster efficiency. Civil wars in the Sudan and the Lebanon cause neglect of water works, whereas the Gulf War wreaked infrastructural and ecological havoc (cf. Political Ecology Group 1991). Said unstable situation has promoted the militarization of water projects. Dams and pipelines are possible vulnerable targets for either a military strategy (both Gulf Wars) or blind terrorism. Chances of success for so-called 'peace pipeline' projects are therefore not just reduced by financial rationality, however ponderous, but most of all, considerations of vulnerability and dependence.

c. global

The international market structure and the loan and aid system offer both opportunities and limitations to a more favourable type of water management.

Aid-granting agencies appear to take their cue from IMF guidelines more and more, which makes a thorough reorganization of the economy a prerequisite for aid. In this study I have argued that, although it would be preferable for states to pursue less generous price and allocation policies (see Ch. 5), a 'cold turkey' strategy will widen social gaps and promote instability, with every inherent undesirable consequence. The UN's weak position allows water-wealthy states to pursue harsh and egoist power politics in the region (Israel, Turkey).

To be sure, the US fills this vacuum, but the Americans themselves are far from devoid of self-interested considerations. Security and the need for outlets for expertise and agricultural surplus effectuates a widening of chasms of inequality throughout the region. Notably rich oil states derive their privileged position from the vital importance of fossile energy to the world economy. As long as rents keep flowing in sufficiently large quantities, these states can afford to do without citizens' participation.

In addition, world agricultural markets are still distorted by subsidies and monopolies, which control cereal prices at such depressed levels that developing countries are forced to grow more water-intensive produce. Whether the larger Mashreq states would benefit from world liberalization under GATT regulations to counteract excessive subsidies and the resulting excess production - which, by the way, would not just affect US and EC but also Saudi Arabia and Israel - is subject to debate, though. Such a liberalization could easily price both dry-farming and small-scale industry out of the market.

6.3 Toward criteria for solutions

Starting from assumptions which stand to reason, such as a positive correlation between economic growth and employment and stability, the ideal-type solution would rank highest on all scores: efficacy (raising supply or reducing demand), efficiency (best cost-benefit ratio), social-political criteria (e.g. promoting stability), financial tolerability, ecological soundness and amenability to economic growth.

Criteria #1:

technical		—	feasibility
political			
financial			
ecological			
social			

In this context, however, this thesis might (wrongly) be interpreted to be a plea for a technocratic approach, or else for an incrementalist, softly-softly reformism. Yet, no matter how 'rational' and 'economistic' my approach, underlying norms and values inevitably play a part. My implicit choice for 'equitability', which I made by according 'access' an important status, and by excluding repressive options beforehand, necessitates a qualification of said criteria.

Since I have started from the desirability of a sustainable development for all, notably changes in the political status quo may well be most beneficial to the development opportunities of the small-scale consumers who presently bear the brunt, and in the process, for social equality and stability. Considering the apparent inadequacy of present regimes' legitimacy, yet few solutions would be eligible for consideration. A satisfactory answer to questions of legitimacy, then, is a fairly indispensable prerequisite for the perpetration of effective water management.

more with less?

A related 'trap' is the apparent contradiction between scarcity management and development. The analysis so far seems to call for 'less', whereas on the contrary, disadvantaged social groups would need lots more to improve their plight. Frugality and development do not necessarily have to be at odds. Non-fossil groundwater supplies and river flow have a relatively high degree of renewability. Short-sighted consumption and regional contradiction however lead to local mining, waterlogging and pollution in one place, whereas on other localities, water evaporates unused and flows into the sea.

In order to link optimal utilization and meeting of needs, the key concept has to be efficiency at the regional level most of all, not just understood in Sexton's economic sense, but also as environmental efficiency - sustainability - and socially equitable patterns of consumption, that is to say, taking account of cultural relations and minimization of social discrepancies. I call it a redistribution of opportunities.

keywords

Besides legitimacy and efficiency, an explanatory model should include a series of keywords, which, in my view, are essential to description, and so to counteraction of the problem of scarcity. Each of these variables will be briefly clarified. It will emerge that it is not very productive to discuss those concepts in terms of 'good' and 'poor' on a scale of effective and efficient scarcity policy: it is necessary to clarify and interrelate these terms. The main concepts are:

efficiency: In a strict sense, it is the best input-output ratio, which, I have argued, should be complemented with a time dimension, social and ecological criteria. It is not equivalent to absolute frugality, but should be seen in relation to objectives of sustainable development.

control: Governability is a necessary precondition for mobilization of human, financial and natural resources for development of the productive base, but appears to have developed into an aim in itself.

legitimacy: The popular base, which must be commanded to facilitate a change of conduct and acceptance of taxation, which, according to conventional political wisdom, can solely be acquired in exchange for a broad participation in the policy-making process ('no taxation without participation').

stability: Seen to be a precondition for governability and creditability, and, in this sense, is a precondition for a more thrifty form of water management. In the region under review, however, stability does not rest on legitimacy, but on a buy-off of dissatisfaction, for which water allocation is an actively used political instrument (cf. Ch. 4). This short-run interpretation of stability, which has degenerated into an unstable status quo, will mesh very uncomfortably with a coherent development opportunity.

social (in)equality: The state is supposed to supply its citizens' basic needs. Yet, in scores of cases, the current (agricultural) policy has a contrary, differentiating effect, liable to lead to social tensions and instability.

ecological carrying capacity: Although nature and environment have tended to display great stamina, and it is true that not every human intervention is necessarily harmful, it appears time and time again, that regenerative capacity are being overestimated and the unexpected side effects of human actions underestimated. The rate of renewal of water wells are a well measurable and fairly calculable clue. Yet, data available on the consequence of changing water cycle is inadequate to such a degree that, actually, the prospects for success of any water project are quite dim.

development: Favourable effects of development efforts ought to be rising living standards and the feasibility of export diversification. As a consequence of the ascent of the rentier state, development rates among and inside of sectors have become in disequilibrium, whereby crucial sectors are neglected. Speeded-up urbanization rates, unemployment and inproductivity are the logical outcome of that neglect.

dependence on rents: Loyalty to external actors is an inescapable price of dependence on strategic rents, and thus, an imperative to be cooperative to strategies which may or may not be in the best domestic interests. The room for manoeuvre to perpetrate initiatives benefiting local needs are very limited. A second, but by no means secondary effect of dependence on rents is the indefinite delay of those policy choices that bank on state or regime legitimacy: taxation and cuts on subvention programs.

technological development: The demise of the bigger = better doctrine has engendered an as yet small but palpable tendency towards rehabilitation of traditional, small-scale methods. This is not to alter the fact that technological progress has the potential to bring a more efficient form of water development and management within the confines of the budget and the capabilities of the state apparatus, and to provide data to improve project planning. But the introduction of technical modernization alone has proved to widen income gaps, while imports of turn-key technology add nothing to domestic know-how, so that dependence on foreign expertise will persevere.

dimensions of opportunity and risk

With regard to variables which cannot easily be quantified, it is not uncommon to phrase the analysis in terms of opportunities/benefits and risks/disadvantages. For the sake of transparency, I will only speak of 'greater' and 'smaller' barriers to be surmounted. But I would readily acknowledge that opportunities and risks can also show variegated results if measured by various dimensions, both in- and outside of the category:

- A solution which looks a promising opportunity in one area, say, the economic criteria, may not pass the test in another, e.g. ecological field of observation.
- A development under review may yield ambivalent results within a certain category, whereby a definitive outcome depends on developments in another area. A project in which economic opportunities take center stage may ameliorate the standards of living for social groups which used to fall behind, but it may just as well widen social gaps when only the well-to-do benefit from the project. Here, state intervention can make the difference.

problem levels

The level of the problem to be resolved must fit in with the depth or profoundness of the problem at hand. A solution which limits demands or changes the structure of consumption obviously contributes more constructively to solving the long-term water problem than a solution which extends supply, and in so doing displaces the problem.

That solution which fits the depth of the problem is therefore considered the better solution. In the field of environmental management theory, von Prittwitz (1990) proposes to distinguish five levels of policy, which connect with ever deeper problem levels. Applied to water problem theory, it appears that the more fundamental the problem, the deeper and more 'inclusive' (society, state and international organizations) solutions are required, to address it with any chance of success.

6.4 Classification of proposed solutions

In various journal articles on the water problem in the Middle East, writers have come up with the most widely divergent solutions. The perspective from which the problem is being perceived impinges on the direction where one looks for solutions. It stands to reason that proposed solutions do not just flow from the point of view from which a problem is regarded, but also from how policy-makers want to regard it. It cannot be ruled out that actors, spurred by a specific interest, consciously or unconsciously opt for a mere partial analysis, a distorted perspective or even a negation of the problem itself, thus virtually diminishing to zero any chances of reaching a satisfactory solution.

The dominant point of reference (inferred from the fact that dissenting opinions seldom reach the limelight, has been of a technocratic kind: the assumption that, sooner or later, any problem will find its solution. There are signs, though, that here and there, a change of mentality is taking place: stronger conservation and prevention regulations in Israel, smaller-scale water management in Oman.

The most obvious technical strategy for solution is supply extension. This strategy is rational where a large share of supplies remain unused: damming can harness flow which would otherwise flow to the sea unused, recent remote sensing experiments show yet unexplored groundwater stocks in the Egyptian desert. Canalization expands the reach of water supply. Demand restraint on the contrary starts from the consumption side. More efficient handling and reduction of water supplies will extend the life-span of water consumption. In water-poor areas this strategy is both economically (conservation) and politically (evasion of competing claims) rational.

Apart from quantitative measures, qualitative regulation is imperative, varying from a ban on disposal of untreated chemical waste to better sewage disposal. Demand reduction and quality amelioration however require political intervention and state regulation (by means of quotas, levies, bans).

For solutions at the level of the economy, quota and reduction of consumption will have to be considered, notably in the agricultural sector. The agrarian economy would have to reduce water intensity, and otherwise better the efficiency of its allocation. Richard Sexton (1990) pleads a broad rethinking of the role of (water-intensive) agriculture in the economy.

The hub here is that the reasonableness of this argument would only gain clarity if water were priced. A realistic sales price would lead to a more thrifty use. On the other hand, this price should not be established at a prohibitively steep level, since that would be to effectively deny poor groups' access to water.

Besides, water use should be accorded a time dimension. Consciousness of the finiteness of water stocks would create an atmosphere where planners are better prepared to anticipate exhaustion, taking better account of rates of renewal. Ideally, such economic estimates would not overlook external cost - which is, actually, nothing but a shift in time towards different sectors and generations.

Political solutions may warrant stability, and mediate competing claims in a mutually satisfactory way, but by no means guarantee more sensible use. It takes a change of mentality towards conservation, which can only gather steam if the government can rally sufficient support for initiating conservationist measures.

In this thesis, I have stressed the predominant and leading role of the state in the economy. It follows from this that the state is the key actor for change. It is of little use to keep harping on the need for a rethinking of the domestic economy, if the international economy, with which the region is rapidly integrating, remains static. Regional and extraregional structures and interests - above, I emphasized international aid organizations and the world food and energy markets - are necessary, but simultaneously potentially limiting preconditions for change.

I will briefly elaborate on this point. The apparent dependency between state and international credit agencies is one the state accepts for political reasons. For, the present situation has attractive features both for external donors and for the state. Should the recipient state wish to restructure its economy, it would be in for a hard time, since the greatest financial contributors to aid agencies are most interested in a continuation of the present conditions, which are most beneficial to free trade, providing them with opportunities for investment, outlets for hi-tech know-how and a dumping ground for food surpluses.

But for the recipient state, the funds accruing to it constitute a welcome safe-conduct not to make structural interventions which inevitably impinge on the wobbly carrying capacity of its legitimacy base. Ample foreign currency stocks facilitated the evasion of hard choices, in other words, always to opt for the alternative which did not directly call on the population's stamina. The current preoccupation with export agriculture intends to perpetuate this condition, at a time when oil revenue and unrequited transactions fall.

It also explains why expensive dams keep being built where cheaper, smaller solutions, 'constructed and maintained by local labour' are perfectly feasible; 'if local resources cannot be found to construct and maintain such waterworks, it must be asked what in the structure of society is preventing such apparently productive use of resources' (Payer 1982, p. 284). External actors constitute, in short, a second circle of change, which will be set in motion as the state's orientation starts to shift.

The aspects brought together in this Chapter reappear in a tentative model, which is featured as an appendix to this thesis paper. May this model serve as a building block for further research.

Epilogue: what price change?

This study has brought together different threads, building on different schools of thought, with a view to gaining a more comprehensive view of the problematic of water management in the Middle East. Every now and then, solutions of a technical or an economic nature are being proposed, but political hubs are seldom acknowledged. It has been my contention that this is a serious omission, and made it a central factor in answering the problematic. This last Chapter will take a specific look at the scope for change, as raised in subquestion #4. Next a juxtaposition of three inferential scenarios. The Epilogue closes with a discussion of a very recent proposal, the 'Wachtel Plan', which neatly sums up the study's subject matter.

Three scenarios

Through inference, I have come up with three different scenarios by which to counter the problem of finite water resources in the Mashreq. All three scenarios offer coherent alternatives, which roughly correspond with: the current line of policy, which is mainly concerned with the here and now (1), the free--market oriented IMF road (3), and a long-term configuration covering middle ground, which, in time, seems to me the most promising option for all parties involved, including the environment (2). The catch here is the phrase 'in time', a time--span on which it is perilous to make definite projections.

1	2	3
<i>The easy way out</i>	<i>The sustainable way out</i>	<i>The hard way out</i>
distributive expense	productive expense	cut spending
maximization of self-interest	regional cooperation	market operation
extension of supplies	reduction of demand	extension of supplies
'mining'	sustainable management	
neglect of maintenance	local maintenance	
industrial agriculture	integrated agriculture	cash cropping
centralized food imports	promotion of small-scale agriculture	cash cropping

The second alternative will be briefly elaborated for all three

geographical levels.

state level

In the present thesis, water resources have been linked to problems of food and (hydro)energy, since it is a vital input for those resources. The free or low-cost supply of water, food and energy is an unwarranted drain on the state budget (subquestion #3), but the free-market alternatives advocated by global aid agencies are no better deal, since they negatively affect the weakest social strata and do not appear to be conducive to long-term sustainability. It would be more fruitful to look at the structures that support the present system. For reasons of control (subquestion #1), the state centralizes food supply through mass importation while stimulating agro-industrial production for the export market with a view to generating foreign currency; which leaves domestic farmers caught in the middle.

Thus, in order to change the pattern of consumption, ultimately, the distributive nature of the state will have to change. The state's role as a patron makes for wasteful and incoherent development projects, while its crude choices of privilege and neglect are demonstrably socially divisive. If the state commanded a legitimate base, it would have less reason to centralize and repress. A legitimate regime can make it possible for water resources to be managed and maintained at the local level, which would ultimately make for far more efficient forms of utilization.

global

This distributive characteristic in turn is the product of global rent structures. Someday, those fossile endowments which have allowed oil states to thrive almost effortlessly will be depleted, or substituted by less precious alternatives. Other states' strategic location, which became an essential bargaining chip for obtaining aid and easy credit from extraregional actors, has already eroded somewhat, due to the USSR's collapse. Yet, one may wonder, incidentally, whether it is unthinkable that regional instability is remunerative enough for some states to accept the risks of that situation and obstruct the present peace process. It is the global aid system itself, which still upholds regional chasms of rich and poor and postpones questions of legitimacy at the state level, which ought to be reconsidered and priorities adjusted, away from donors' foreign policy interests and better geared to recipient states' needs.

region

One of the states that has benefited greatly from the region's strategic importance is Turkey, still a principal recipient of American aid. With the help of these funds, Turkey is clearly looking for ways to increase its sphere of influence. Water politics is at the core of its strategy for the Mashreq region. A Turkish *Pax Aquarum* (Kolars/Mitchell 1991) may not seem too obvious, but the fact remains that the Turks have made periodic shows of their power. No matter how 'reasonable' the temporary closure of the Euphrates flow to fill Lake Ataturk and how peaceful official statements, it was a signal to its neighbours which could hardly be misread. It is a risky hydro-hegemonic strategy, though, since chances remain that a future wilful act of arrogance will spark off retaliation from affected states. Apart from the Americans, there are no counteracting forces: Arab neighbours are still divided on the issue (and so is the European Community), Israel is only too eager for any additional water, while supervisory powers of overarching legal and political institutions are lacking. Up until now, the United States have chosen to turn a blind eye, and as American attention turns increasingly inward, the region is left to its own uncompromising devices.

Creating a diversion again?

It is apposite, then, to note that the Wachtel plan, a recent and interesting though far-fetched Israeli variety of Turkey's Peace Pipeline, would only enhance Turkish regional power. Wachtel may have reasoned away fears of Syrian obstruction, but tellingly left Turkish aspirations out of the equation. Any realistic regional water initiative will have to face up to Turkey's scope for obstruction.

In addition, though, I have a more fundamental quibble with the plan. The idea commendably - contrary to the Peace Pipeline - acknowledges the fact that any regional water solution will have to be linked to a satisfactory compromise to the Arab-Israeli question. But the solution on offer is obviously a status-quo approach, not only since it declines to provide a firm answer to the issue of rights to the West Bank aquifers, but, worse, appears to have all the characteristics of a short-term, supply-type solution (cf. Ch. 6).

The stepping-stone for all other aspects of change just touched on is the perception that water stocks, just like oil stocks, are finite, and cannot be stretched forever. If that realization, which admittedly runs counter to current mentality and ideology, does not come through, there won't be much to fight about in a water war.

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